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**Primary School Physical Education:  
Professional Learning as a  
Partnership Between a Specialist  
and Generalists**

A thesis  
submitted in fulfilment  
of the requirements for the degree

of

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by

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THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

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## **Abstract**

The quality of physical education (PE) lessons delivered by generalist primary school teachers is recognised across the literature as inadequate. As a secondary PE teacher, I became acutely aware of the challenges faced by generalist primary school teachers in Aotearoa New Zealand delivering PE lessons to their students. Issues underpinning the research were concerned with the effect of the marginalisation of PE in primary schools on teachers, the impact high stakes testing for literacy and numeracy has had on the availability of professional learning (PL) for teachers, and also a lack of confidence to deliver PE for many generalist teachers. The motivation for this study was to provide generalist primary teachers with a structured and supportive PL programme that could enhance their pedagogical skills, knowledge and confidence to teach PE.

This research sought to examine how a specialist secondary PE teacher could support primary school teachers in the delivery of PE lessons. The *PE Partnership Programme* was developed with the support of Sport New Zealand's *KiwiSport* funding initiative. The PL programme involved the modelling of lessons, co-teaching opportunities and the provision of resources to enhance pedagogical content knowledge (PCK) and understanding of the curriculum model *Teaching Games for Understanding* (TGfU), with the aims of growing their confidence, and facilitating the delivery of high-quality lessons.

This study was situated in both the interpretivist and constructivist research paradigms. An interpretive paradigm was adopted as it allowed for an appreciation of how the teachers constructed and understood the realities of their lived experiences, feelings and interactions during the PL programme. The research was also positioned within the constructivist theory where knowledge acquisition is constructed rather than transmitted. Qualitative methods provided a basis for a study that was evaluative and reflective. Qualitative data was collected through analysis of documentation, semi-structured individual and focus group interviews, observation of teachers teaching PE and the collation of field notes throughout the *PE Partnership Programme*.

The findings revealed that the teachers involved in the programme increased their confidence to teach PE and that their attitudes towards PE were changed: as a result three significant key learnings were identified. Firstly, it showed the need for positive relationships to be built between the facilitator and the participants. The relationship between the PL provider/knowledgeable expert and the generalist teachers has been observed to be crucial for the programme to be successful. Secondly, the necessity for the facilitator to understand the context in which the PL is being undertaken, which includes the school culture and the working conditions of the teachers. Thirdly, the teachers valued the fact that the PL was situated in their classroom practice alongside the students, using school facilities and equipment, and was not abstract theorising.

Conversely, the findings indicated that despite the significant amount of time spent with each of the teachers, limited progress was made in developing PCK and physical education-content knowledge (PE-CK). This issue, in turn affected the teachers' ability to move beyond the level of asking surface questions and they struggled to adapt activities to meet the needs of their students. The challenges of supporting generalist teachers as teachers of PE are highlighted, and guidelines are suggested for providers of PL concerning their responsibilities and positive attributes required. Also proposals have been made for the way that future PE professional learning (PE-PL) could be delivered to primary teachers.

PE in the form that was presented in this PL programme has been shown to be valued by the primary teachers. Mixed with the reflections of where change in the programme may have been needed the research offers useful insights into how PE-PL for primary teachers could be reconsidered. The recommendations from this research are aimed at the funding organisations and providers of PL with the view to enhancing the future provision of primary school PE-PL in Aotearoa New Zealand and possibly considered in other contexts.

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*Ehara taku toa I te toa takitahi,  
engari, he toa takitini.*

*Success is not the work of one,  
but the work of many.*

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*Aku mihi nui ki a koe – Many Thanks*

## **Dedication**

*In loving memory of my late father and brother.*

*To mum for your unconditional love and encouragement  
when times were tough.*

*To my patient husband Dave, for your love and invaluable support  
throughout everything.*



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## List of Acronyms

AfL	Assessment for Learning
AOTT	Adult other than Teachers
BES	Best Evidence Synthesis
CK	Content Knowledge
CoL	Community of Learning
CoP	Community of Practice
CPD	Continuing Professional Development
CRT	Classroom Release Time
DCMS	Department for Culture, Media and Sport
DEP	Demonstration, Explanation and Practice
DfES	Department for Education and Skills
DoE	Department of Education
DPEG	Developmental Physical Education Group
ELA	Essential Learning Areas
EPPAP	Externally Provided Physical Activity Programmes
ERO	Educational Review Office
GERM	Global Education Reform Movement
GPCK	General Pedagogical Content Knowledge
HPE	Health and Physical Education
IOC	International Olympic Committee
ITE	Initial Teacher Education
MoE	Ministry of Education
MoH	Ministry of Health
NCEA	National Certificate of Educational Achievement
NGB	National Governing Bodies
NMSSA	National Monitoring Study of Student Achievement
NZC	New Zealand Curriculum
NZEI	New Zealand Educational Institute
NZHPE	New Zealand Health and Physical Education
PAI	Physical Activity Initiative
PCK	Pedagogical Content Knowledge

PD	Professional Development
PDF	Portable Document Format
PDM	Partnership Development Manager
PE	Physical Education
PE-CK	Physical Education Content Knowledge
PE-PCK	Physical Education Pedagogical Content Knowledge
PE-PL	Physical Education Professional Learning
PENZ	Physical Education New Zealand
PESS	Physical Education and School Sport
PESSCL	Physical Education, Sport and School Club Links
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PL	Professional Learning
PLD	Professional Learning and Development
PLT	Primary Link Teachers
PPTA	Post Primary Teachers Association
RAINS	Research Analysis and Insight into National Standards
RST	Regional Sports Trust
SE	Sport Education
SLT	Senior Leadership Team
SPARK-PE	Sports, Play and Active Recreation for Kids
SSC	Specialist Sports College
SSCo	School Sports Coordinator
SSP	School Sport Partnership
TGfU	Teaching Games for Understanding
TIMSS	Trends in International Mathematics and Science Study
UNESCO	United Nations Educational, Scientific and Cultural Organisation

## **Chapter One: Introduction**

### **An introduction - my personal and professional history**

Physical education (PE)<sup>1</sup> and sport<sup>2</sup> have always been a part of my life. As a student, PE was my favourite subject, and co-curricular sport consumed a considerable proportion of my ‘free time’. I was fortunate with the experiences, opportunities, and achievements afforded to me through PE and sport. Now I am a secondary PE teacher with 26 years of teaching experience, 13 years in England and 13 in Aotearoa New Zealand<sup>3</sup>. It is important to share my personal and professional background in PE and sport in this section as it is these experiences from early childhood then through my teenage years into adulthood that have provided me with beliefs, values, and biases concerning PE and sport, which have underpinned and informed this research.

#### PE and sport at school

In the late 1970’s when I was at primary school, I was lucky to have two teachers who were very willing to teach PE; they always ensured we had our ‘PE’ lesson each week. However, looking back on this lesson it was clearly ‘sport’: everything we participated in was sports orientated. I cannot remember being taught the skills for each of the games; I remember just ‘playing’. I guess I was blessed in some way that through trial and error and natural ability I was able to learn the skills and be successful. My interest in sport was generated through these two teachers, and as a result, I was always playing sport at interval, lunchtime and after school. I was involved in as many of the sports teams as possible. At the age of 10, I pestered my parents to allow me to attend the local athletics club as my best friend was a member. At first, they resisted, but after some persistent badgering they relented, stating “it would be just a passing phase”. The passing phase lasted 22 years and proved to be the sport where I found my most significant success, throwing a javelin at a regional level.

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<sup>1</sup> Physical Education refers to the activities undertaken during curriculum time at school. Further elaboration is detailed in Chapter Two.

<sup>2</sup> Sport refers to the activities undertaken in co-curricular (extra-curricular) time, time outside of lessons. Again further detail is provided in Chapter Two.

<sup>3</sup> Aotearoa is the name used by Māori (the indigenous people) for New Zealand.

When I moved to secondary school at the age of 11 in 1980, PE and sport became a significant part of my life. I met an inspirational PE teacher who had an enormous impact on me. She introduced me to a wide array of activities and sports that provided me with opportunities I could have only dreamt of. I developed into a competent sportsperson gaining representative honours in three different sports. The PE curriculum was very sports orientated, there was no thematic approach to teaching. Each unit of work represented a specific sport and was repetitive with just the context changing. The teaching involved learning how to play the sport of netball, hockey or basketball, through the didactic teaching of the skills and techniques associated with these sports. I found participating in and learning new activities and sports very easy; I could not understand why other students found it challenging to learn a skill or understand the tactics of a game and at times this frustrated me as I felt that they were holding me back. My teachers' passion and commitment to PE inspired me to be the first in my family to go to university to study and become a PE teacher myself. I will always be indebted to the teacher we as students affectionately referred to as Mrs W for seeing the potential in me, in both the sport and academic arena.

### PE teaching experiences

Life at university as an undergraduate was tough. I was homesick in my first year and considered giving up on my dreams to return home. It was Mrs W, along with my parents, who encouraged me to continue and complete my degree. The decision to finish was one of the best decisions I have ever made, and it has resulted in my being where I am today, having experienced many unique situations through teaching PE, and the coaching and management of sport to place me in a position to undertake this research.

My experiences as a secondary PE teacher, Head of Department and a member of the subject association for PE in both England and Aotearoa New Zealand have all contributed to developing my understandings of PE. Also, having experienced such a wide selection of sports and being competent in most, I have developed a substantial body of knowledge over the years. This knowledge has provided me

with the basis to transmit the enjoyment of participating in and learning through PE and sport to the students in my schools.

My interest in primary school PE was ignited through my role as a PE specialist and Director of Sport in a Specialist Sports College (SSC) in England. Part of my role in the Physical Education and School Sport (PESS) (Department for Culture Media and Sport, 2000) programme along with my department was to provide professional learning (PL) to the generalist primary teachers in the school cluster associated with the Sports College.

### An inexperienced leader of professional learning

In 2010, after immigrating to Aotearoa New Zealand, an opportunity was provided for me to apply for and then deliver the *PE Partnership Programme*, a PL initiative that was provided to generalist teachers from two primary schools. My experiences in England assisted in the development of my ideas, and my involvement as a participant in PL. As a PE teacher, I have been the recipient of PL designed to bring about change in policy, curriculum and my teaching practice. Some of this PL was effective and some, unfortunately, ineffective for me personally.

Before starting the *PE Partnership Programme*, my experience in delivering PL was limited to the occasional one-hour session as part of a teacher only day within my school. Additionally, I had delivered PL to my partnership schools through the Sports Colleges programme in England. All these were environments in which I felt safe, through the existing relationships with my colleagues and presenting information that was not necessarily provocative or focussed on change in practice. I had never received any formal or informal preparation for being a leader of PL and had not engaged in the literature relating to this prior to designing and beginning the delivery of the *PE Partnership Programme*.

The intention was to design a programme that supported primary teachers in their delivery of PE. I was the *PE Partnership Programme* leader and secondary school PE specialist facilitating the PL for the primary school teachers. The programme warranted an investigation into whether the approach of modelling lessons and co-

teaching with the teachers could be seen as an alternative model for PL. I wanted the research to be of value to teachers, teacher educators, and PE professional learning (PE-PL) facilitators both in the primary and secondary education sectors.

As the leader and initiator of the *PE Partnership Programme*, I was positioned as the expert, concerning the broad area of PE and the approaches that could support teachers to develop confidence and knowledge to deliver PE lessons more effectively. The fact that I was being funded by *KiwiSport* to undertake this work further reinforced the perception of expertise. However, I was naive in my assumptions and thinking about what constituted an effective PL programme. I designed the programme as described in Chapter Three with what I thought was a sufficient understanding and knowledge of both primary schools and PE, to ensure a quality PL programme was delivered. The challenges raised through my naivety and assumptions will be referred to in subsequent chapters.

This chapter has begun to explain how my personal and professional history has shaped the study that was undertaken. The next section provides details of the context in which this research was placed. Understanding the context is important as some of the influencing factors are unique to Aotearoa New Zealand and each of the schools, but all schools are different. The chapter then proceeds to illustrate consequences of the Global Education Reform Movement (GERM). Then programmes that have influenced the structure of the PL programme central to the research are described. The chapter concludes with an outline of the PL programme and an overview of the thesis.

### **What is happening in Aotearoa New Zealand primary schools? - The context for the study**

PE is a learning area that has been incorporated into the Aotearoa New Zealand education curriculum for over a century. It is essential to provide the context to ensure an understanding of the broad-ranging issues surrounding PE in primary schools and faced by the primary school teachers. PE is a subject that has been shown to be marginalised in many Aotearoa New Zealand schools (for example, for example, Dyson, Gordon, Cowan, & McKenzie, 2016; Penney, Pope, Lisahunter, Phillips, & Dewar, 2013; Petrie, 2010a; Powell, 2015) for various reasons. These

reasons have included, but are not limited to, the declining status of PE, the teachers' low level of confidence to teach PE and the outsourcing of PE to external providers (all of which are discussed in detail in Chapter Two).

### New Zealand Curriculum development: A brief history of recent changes

As a policy document, the education curriculum taught in Aotearoa New Zealand has changed significantly since the 1980's, and many of these changes have occurred as a result of large-scale reforms in governance, curriculum and assessment demands. In 1993, a revision of the curriculum saw the development of specific key learning areas that fit into a coherent framework known as the *New Zealand Curriculum Framework (Ministry of Education, 1993)*, and each learning area developed individual documents. In this framework, PE was not seen as a separate Essential Learning Area (ELA) but, was encompassed under the umbrella of Health and Physical Wellbeing. The dominant discourse in the 1990's was the Human Capital Theory, which advocated a strong connection between education, employment and wealth creation on a global stage (Ovens, 2010). It was seen as necessary that the young people were able to contribute fully to the changing needs of the workforce.

In 1999 with the release of *New Zealand Health and Physical Education Curriculum (NZHPE curriculum)* (Ministry of Education, 1999) document a change in the dominant discourse was observed. The writers argued for a socio-critical perspective, instead of the neo-liberal principle of using a healthy body to increase economic productivity previously promoted (Culpan, 2000; Ovens, 2010). The socio-critical perspective was an attempt for schools to develop PE programmes that would encourage students to be involved in physically active lifestyles that they found enjoyable and to be able to move skilfully, while also being able to reflect on and critique their learning. Culpan (2000), one of the writers of the NZHPE curriculum claimed this was a document that required an extensive change in the way PE would be thought about and practised within schools.

The NZHPE curriculum had only been initiated for a relatively short period when a 'curriculum stocktake' began (McGee et al., 2004). Some problems and issues

associated with the curriculum of Aotearoa New Zealand and its development were raised both inside and outside of the education sector. A lengthy review process of the entire school curriculum between 2000 and 2002 resulted. The ‘curriculum stocktake’ investigated concerns, such as philosophical, epistemological and pedagogical issues, the capability of teachers to meet the demands of the curriculum and manageability; also the over-crowdedness of the curriculum was examined. The outcome of the ‘curriculum stocktake’ was the development and implementation of the *New Zealand Curriculum* (NZC) (Ministry of Education, 2007a) with a significant change occurring in the development of this curriculum. Before the NZC, each learning area had provided a separate manuscript, but now the documentation for all the learning areas was contained in one document in a broadly summarised format.

The current curriculum is the NZC, the latest in the line of curriculum documents developed in Aotearoa New Zealand. The NZC consists of eight learning areas, one of which is Health and Physical Education (HPE). The other learning areas included are English, the arts, languages, mathematics and statistics, science, social sciences and technology. The learning area of HPE “encompasses three different but related subjects: health education, physical education and home economics” (Ministry of Education, 2007a, p. 22).

The purpose of the NZC is to provide the official policy that relates to teaching and learning in English-medium schools of Aotearoa New Zealand. The curriculum document’s principal intention is to guide schools when planning, designing and reviewing their curriculum by guiding the direction that student learning should be taking. “The *New Zealand Curriculum* is a clear statement of what is deemed important in education” (Ministry of Education, 2007a, p. 4, p. 4). According to Karen Sewell, the then Secretary of Education in 2007, “this document provides a clear set of principles on which we as teachers base our curriculum decision-making”. The NZC document is a “framework to ensure that all young New Zealanders are equipped with the knowledge, competencies, and values they will need to be successful citizens in the twenty-first century” (Ministry of Education, 2007a, p. 4, p. 4).

On examination of the 2007 curriculum document, there is more information for teachers in what is often referred to the front end of the document in regards to the values, vision, the key competencies and effective pedagogy, although much less for the actual learning areas compared with the guidance available for teachers in the previous HPE (Ministry of Education, 1999) document. However, this greater detail was offset by a reduction in the amount of PL available to teachers especially for PE in the primary sector (Petrie, Jones, & McKim, 2007). Changes to government priorities to focus on literacy and numeracy coincided with the loss of over 20 nationally funded PE-PL advisory roles (Dyson, Gordon, & Cowan, 2011; Petrie & Lisahunter, 2011).

The NZC has an overriding vision, which states what is wanted for the young people of Aotearoa New Zealand, for example, “confident, connected, and lifelong learners”. The principles of the Treaty of Waitangi<sup>4</sup>, cultural diversity, decision making, inclusion, learning to learn, community engagement, coherence and future focus underpin the curriculum as a whole. Additionally, the document details ten values-excellence, innovation, inquiry, curiosity, diversity, equity, community, participation, ecological sustainability, and integrity. These values are deemed to be important for students to display as well as the five key competencies that include thinking, using language, symbols and texts, managing self, relating to others and participating and contributing. The key competencies and values are to be encouraged, modelled and explored and are seen to be critical if students are to participate effectively in today’s society and provide lifelong learning opportunities.

The education curriculum of Aotearoa New Zealand has been transformed over the past 30 years from a document underpinned by neo-liberal principles to one that advocates for a socio-critical perspective. Also, the format changed from one that was highly prescriptive, detailing what should be taught by teachers, to one that encourages teachers to design PE programmes that best suit their students. However, the reform has provided challenges for the teachers, as it is the teachers

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<sup>4</sup> The Treaty of Waitangi - (Māori: Tiriti o Waitangi) is a treaty first signed on 6 February 1840 by representatives of the British Crown and various Māori chiefs from the North Island of New Zealand.

who are responsible for the day-to-day implementation of the curriculum requirements (Dyson et al., 2016; Petrie, 2010b).

### The changing landscape of professional learning

The context of PL has changed dramatically in Aotearoa New Zealand since this research was initiated. Previously schools were provided with funding from the Ministry of Education (MoE) to allocate and spend on the PL that they felt was most appropriate for their school, teachers and students. The funding was not assigned to any specific priority areas; teachers could choose to attend PL to increase their knowledge in a subject or topic that interested them. However, in 2016 the MoE announced there would be changes to the Professional Learning and Development (PLD) (Ministry of Education, 2017c) system. The changes followed after an advisory group report that examined what was working well and what was causing concern in the existing PLD system.

The change was designed to increase the effectiveness of PLD through supporting teachers and leaders to improve the outcomes for students. Increased effectiveness would be brought about through undertaking inquiries to develop improvement plans that consequently brought about changes to the system (Ministry of Education, 2017a). For schools, the redesign of PLD has meant that the centrally funded PLD is now focused on a small number of priority areas-maths, science, reading, writing and digital fluency. To access the funding, schools have to form Communities of Learning (CoL) or Kāhui Ako<sup>5</sup> (Ministry of Education, 2017a) with other schools or organisations. The Kāhui Ako is a group of educators and training providers working together to help students achieve their full potential (Ministry of Education, 2017a). The CoL places the learner at the centre of any decisions made; also, all the resources, skills and expertise that exist in the CoL are used to meet the needs of the students better.

The formation of a CoL is an extensive process with numerous forms to complete after undertaking an inquiry process to generate data to support the project that is

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<sup>5</sup> Kāhui Ako (Communities of Learning) The Ministry of Education PLD programme as part of the Investing in Education initiative Ministry of Education. (2017a). *Communities of Learning - Kāhui Ako*. Retrieved from <https://www.education.govt.nz/early-childhood/communities-of-learning-kahui-ako/>

deemed important by the CoL. Facilitators are chosen to support the CoL from a national database of accredited facilitators. At the time of this research, there was only one specialist PE accredited facilitator in the database who is a part-time subject advisor for the PE subject association (Physical Education New Zealand (PENZ)). This situation speaks to the limited importance placed on PE in regards to PL within Aotearoa New Zealand (Hipkins, Cowie, Boyd, Keown, & McGee, 2011; Penney et al., 2013; Petrie & Lisahunter, 2011). The formation of a CoL for PL can be seen as a positive for teachers to develop their knowledge by working with a group of like-minded teachers. However, it could also be seen to be detrimental to learning areas that are not seen to be priority areas, as the availability of PE-PL will be reduced further. Additional consequences of the reduction of PL will be highlighted in the following chapter the Literature Review.

### The Global Education Reform Movement and Education

Change is constant in education, however, in the last ten years, teachers in Aotearoa New Zealand have had to contend with significant ongoing policy changes and educational reform. In addition to the curriculum changes, Aotearoa New Zealand primary school teachers are contending with issues that have arisen from the GERM (Sahlberg, 2006). According to Sahlberg (2014) since the 1980s some features have become common globally within education policies and reform principles. The GERM has brought attention to issues such as standardised testing, the marketisation of schools, performance pay, charter schools, and the narrowing of the curriculum (Petrie, 2016b); also, there is the search for low-risk ways to reach learning goals and the use of corporate business management models (Sahlberg, 2014). These features have been used in an attempt to improve the quality of education and fix the apparent problems in education systems in countries such as the USA, the UK and Australia. Evidence of these common features is now beginning to be seen in Aotearoa New Zealand schools and especially in the primary schools.

#### *Standardised testing*

Perhaps the most controversial feature of the GERM evident in Aotearoa New Zealand primary schools was the introduction of the literacy and numeracy

*National Standards*<sup>6</sup> (Ministry of Education, 2009) in 2010 by the then governing National political party. The standardised testing measures termed *National Standards* were introduced, according to the government, to track the level of achievement of every student as they progress through their school life. However, Sahlberg (2006) states that accountability for teachers and schools has led to the introduction of standards, indicators and benchmarks. The standardisation of education through a ‘one-size fits all’ testing system has caused concern in the teaching profession and academics due to the repercussions now being experienced.

Former Minister of Education Anne Tolley stated that the *National Standards* and the NZC reinforce each other (Ministry of Education, 2009). The standards were developed and imposed without any piloting or testing. Additionally, they do not measure the significant strides in progress a child has made, often referred to as the ‘valued added’ progress. The test results show raw, unmoderated data, and do not take into consideration a student’s starting point, the school intake or contextual differences between schools (Thrupp, 2013). In contrast, “*The New Zealand Curriculum* provides a breadth and richness of learning. It nurtures individual talents, cultivates creativity, celebrates diversity, inspires curiosity, and acknowledges the importance of a student’s personal learning journey” (New Zealand Educational Institute, 2010, p. 22).

The data depicting a student’s progress has become a significant issue as school league tables are produced to make comparisons between schools, the teachers, and the students. Initially, the government claimed league tables would not be produced, and schools were undoubtedly against any production of tables that compared schools against each other (Thrupp, 2013). However, the government backtracked and claimed that league tables would make schools and teachers more accountable and would identify schools that were underperforming and needed further assistance. League tables would be seen as positive for schools and students performing well, but this may not be the case for schools and students at the lower end of the league tables.

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<sup>6</sup> *National Standards* are a set of detailed expectations that students in NZ need to meet in reading, writing and mathematics in the first eight years at school.

### *Standardised testing and school deciles*

The decile<sup>7</sup> rating system is currently used by the MoE to provide funding to schools: the lower the school's decile, the more funding it receives. This is because low decile schools have a higher proportion of students from low socio-economic family backgrounds, students with significant barriers to learning and are at risk of academically not achieving, so receive the extra support (New Zealand Post Primary Teachers' Association, 2013) (PPTA). According to the PPTA (2013) a student's background can mean they start in a position of disadvantage when their parents tend to have limited school qualifications, the family income tends to be lower, and houses are more crowded, and the children often have increased health and learning needs. It was also recognised by the PPTA that these students can achieve educationally, but often require extra educational, pastoral and guidance throughout their schooling.

A report by the Educational Review Office (ERO), found that student outcomes in high decile (deciles 8-10) primary schools were greater than those in medium decile (decile 4-7) primary schools. They were also significantly higher than those of students in low decile (decile 1-3) schools (Education Review Office, 2005). These statistics are supported by the findings from ERO (Education Counts, 2016) taken from the 2016 *National Standards* results.

*Table 1: Percentage of students achieving at or above the National Standard for writing 2016<sup>8</sup>*

Ethnicity	Māori	61.6%
	Pasifika	60.5%
	European/Pākehā <sup>9</sup>	77.1%
Decile	Decile 1	54.9%
	Decile 10	81.5%

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<sup>7</sup> A decile is a statistical term, used when a group or population has been divided into ten equally sized groups, therefore, giving ten deciles. Schools in decile 1 have the highest proportion of students from low socio-economic backgrounds while schools in decile 10 have the highest proportion of students from high socio-economic backgrounds Ministry of Education. (2011). *Deciles*. Retrieved from <http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/SchoolOperations/Resourcing/OperationalFunding/Deciles.aspx>.

<sup>8</sup> Data taken from Education Counts (2016a) website citing all *National Standards* achievement data.

<sup>9</sup> Pākehā – is a Māori language term for non-Māori or for New Zealanders who are 'of European descent'.

The data demonstrated that students of Māori and Pasifika ethnicities and in Decile 1 schools perform at lower levels in the *National Standards* tests compared to students from European/Pākehā backgrounds in Decile 10 schools.

A school's decile is in no way linked to the quality of education it provides (Ministry of Education, 2011). However, the publication of league tables depicting literacy and numeracy *National Standards* data is severely detrimental to lower decile schools. These results are the main pre-determinants of success and failure for the students, the teachers, and the schools, despite these students starting at a potentially disadvantaged level compared to a student in a higher decile school. An article by Jones in the *New Zealand Herald* newspaper in March 2014 provided evidence that parents were using league tables to determine if a school is providing quality education for its students. The misperception that decile is related to the quality of education a school provides is reinforced by the league tables showing low achievement, and the continued focus by the government furthers this misconception.

Schools in the more impoverished communities are displaying shrinking rolls due to local families withdrawing their children to enrol them in schools in the wealthier suburbs (Jones, 2014; Thrupp, 2015). This claim is supported by the empirical study of Waslander and Thrupp (1995) who found that students from wealthier families would usually attend schools with middle-class intakes rather than the low socio-economic schools. The movement of students affects the lower decile schools as funding decreases as it is related to the number of students on the school roll. The reduction in funding further increases the polarisation between the communities that 'have' and those that 'have not'. Not only are students affected due to their personal circumstances but also by the institutionalised policies aimed at increasing educational attainment in schools. In an attempt to improve students' results the teachers in the low decile schools have paid more attention to the tests, which has resulted in a narrowing of the curriculum (Petrie & Lisahunter, 2011; Thrupp & White, 2013).

### *Performativity*

The education reform policies have led to a culture of performativity both nationally and internationally. Ball (2003) describes performativity as a “technology, a culture and a mode of regulation that employs judgements, comparisons and displays as a means of incentive, control, attrition and change-based on rewards and sanctions (both material and symbolic)” (p. 216). According to Craft and Jeffrey (2008), the performativity culture is being used by governments across the world to raise standards in schools; the intention is to raise the achievement of the population in schools, in order to develop highly-skilled workforces. Awareness concerning performativity is needed, as it is resulting in profound consequences on teachers and in particular primary teachers in Aotearoa New Zealand.

The introduction of standardised testing and the formation of league tables through the student test scores (Ball, 2003; Troman, 2008) has resulted in what is referred to as the culture of performativity. These systems demand teachers ‘perform’ and then they are held accountable; through performativity, Governments increasingly assert control over the professional lives of teachers (Burnard & White, 2008). The success and quality of an education system for a Government is measured regarding achievement in numerical targets that has been evidenced through the collection of data (student test scores) and teachers’ performance.

Burnard and White (2008) point out that teachers are required to teach in the sanctioned ways, then test students to measure their progress using the mandated standards and then report these results. Through the measurement of outcomes and the scrutiny of their performance, teachers’ work is highly monitored for efficiency and effectiveness (Miniotis, Webb, & Rich, 2009). These policy measures to improve achievement according to Troman (2008) have the potential to generate overwhelming implications for primary teachers regarding their work, their identities, their commitment to teaching and how they view their careers. Ball (2003) claims that the work of teachers is significantly affected by “the terrors of performativity” (p. 216).

Education within a culture of performativity becomes characterised by increased competition, accountability and measurement of performance (Miniotis et al.,

2009). The rigidity and importance placed on the *National Standards* by schools and their communities have led to the narrowing of the primary school curriculum.

#### *Narrowing of the primary school curriculum*

With the advent of GERM, the focus on the core subjects-literacy and numeracy has become paramount. Governments are identifying criteria for good educational performance in reading, mathematical and scientific literacy from international testing programmes. The popular tests include PISA (Programme for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study) and PIRLS (Progress in International Reading Literacy Study) (Sahlberg, 2014). The data provided from these curriculum areas are now ‘high-stakes’ for schools resulting in the curriculum offered to students becoming narrower (Petrie, 2016b; Powell, 2015) at the expense of subjects such as social studies, the arts, music, and PE. The league tables have driven schools and teachers to narrow their teaching to what is measured rather than the teaching and learning that suits the specific students.

Evidence of a narrowing curriculum has also been found in Aotearoa New Zealand as part of the Research, Analysis and Insight into *National Standards* (RAINS) Project commissioned by the New Zealand Educational Institute (NZEI) (Thrupp & White, 2013). The research has shown that the *National Standards* are threatening to produce a ‘two-tier curriculum’. Students in lower decile schools will be forced into a less rewarding and less attractive curriculum in an attempt to raise achievement, despite the best efforts of the teachers and the Principals in these schools to avoid this situation (Thrupp & White, 2013). The RAINS project also found that the *National Standards* were absorbing more time and energy from the teachers, as a result of the amount of assessment and measuring that is needed. As a result, the individualised learning and rich variety advocated in the NZC is being jeopardised.

The government’s claim to be ‘making teachers more accountable and identifying schools that require extra assistance’ (Ministry of Education, 2014a) can be seen to be related to information gained from the league tables. This claim was complemented with a plan to spend \$359 million on new highly-paid teaching and

leadership roles as part of the 'Investing in Educational Success' policy (Ministry of Education, 2014a). Many teachers and the teachers' unions the NZEI and the PPTA, believe this policy is the forerunner to performance pay for teachers, which is identified as a feature of the GERM. Additionally, performance pay is seen by many teachers and Principals as a controversial issue as evidenced in the RAINS reports by Thrupp (2013) and, Thrupp and White (2013). The alignment of performance pay with league tables could have a significant effect on schools performing at the lower end of the table. The teachers and Principals signal this issue in the RAINS reports where schools could face challenges recruiting staff to positions if poor *National Standard* results were to be linked to a teacher's salary.

All three of these characteristics can be observed in the primary school system of Aotearoa New Zealand; also, standardised testing has impacted on both the narrowing of the primary curriculum in Aotearoa New Zealand and the teachers through performativity and accountability. Appreciation of these concepts of the GERM is essential to the understanding of the context in which this research has been undertaken.

### **The current research project**

The study reported on in this thesis is centred on the teaching and learning in PE in two primary schools (see Chapter Three for more information about the schools). The focus of the investigation was the impact of the *PE Partnership Programme*, on the primary school teachers' ability to deliver quality teaching and learning in PE. There were three aims of the research; firstly, to examine the role of the specialist PE teacher who facilitated the PL opportunity. Secondly, it aimed to gain an understanding of what support was most effective for the generalist classroom teacher in the delivery of PE, and thirdly to determine whether this type of PL is a viable and self-sustainable method of delivery once the facilitator had left the school.

The following section provides background information on two programmes that influenced the design and implementation of the *PE Partnership Programme*. The first is the *School Sport Partnership (SSP)* (Department for Education and Skills (DfES) & Department for Culture Media and Sport (DCMS), 2003) programme

from England and the second is the *KiwiSport* initiative (Ministry of Education, 2014b) in Aotearoa New Zealand. The third section describes South Auckland, the context in which the primary schools and the PL programme were placed. Teachers in South Auckland face challenges that are different from many other areas of Auckland.

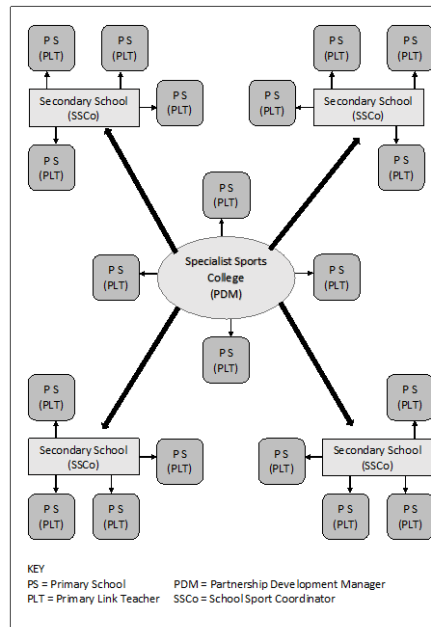
### School Sport Partnerships in England

The SSP programme was used as an initial start point for the development of the *KiwiSport* funded project-the *PE Partnership Programme* (detailed later). The SSP programme originated due to the significant changes that occurred for PE and school sport (PESS) through the introduction of the UK's, 'A Sporting Future for All' (Department for Culture Media and Sport, 2000).

SSPs were created to act as a hub to form a 'family' of schools where the expertise, the facilities and the resources were shared to improve the PESS that was on offer to all the students in each of the schools within the 'family'(Department for Education and Skills (DfES) & Department for Culture Media and Sport (DCMS), 2003). At the centre of each hub were SSC, to become designated as a SSC, a secondary school needed to undertake a lengthy application process with the Department of Education (DoE). Once designated the status of an SSC additional funding was received to improve PESS and place sport at the centre of the schools' curriculum. Funding was allocated as per the development plan that was produced as part of the application process, and each SSP across the country was unique to cater for the needs of students in each SSP. The SSP was comprised of the SSC and four or five secondary schools, with approximately 20 primary schools linked to either the SSC or the secondary schools (Department for Education and Skills (DfES) & Department for Culture Media and Sport (DCMS), 2003). All English state primary and secondary schools were associated with an SSP.

The figure below depicts a representation of a SSP; in the centre is the SSC, while the four secondary schools that are linked and connected to each of these secondary schools are the associated primary schools. However, some SSP's could have included more or fewer secondary schools and consequently more or fewer primary

schools. Differences occurred due to the development plans produced by the sports college in their initial proposals.



*Figure 1: A representation of The Sports College and School Sport Partnership Programme (adapted from Flintoff, 2003)*

Each SSP had a team of staff who worked with a group of their local primary and secondary schools (Easton, 2003; Flintoff, 2003). The staff consisted of a Partnership Development Manager (PDM), who was in overall charge of the partnership and was based at the SSC. Working under the guidance and direction of the PDM were School Sport Coordinators (SSCo) who were PE teachers working in the associated secondary schools to improve the PESS opportunities. Also, each of the primary schools had a Primary Link Teacher (PLT), this teacher was released from his or her teaching duties for 12 days per year to fulfil their partnership commitments. All the partnership staff worked together collaboratively to provide improved PESS opportunities for all the students attending the SSP schools (DfES & DCMS, DfES & DCMS, 2003; Easton, 2003; Flintoff, 2003).

As a Director of Sport in an SSC in my previous teaching position (before immigrating to Aotearoa New Zealand), I was responsible for many programmes both within my school and in local primary and secondary schools. One of the main projects was a programme that involved PE teachers from my department working alongside the generalist teachers from our feeder primary schools to upskill these

teachers in the delivery of PE. Each member of the department was linked with at least one primary school in our SSP. Each week the teacher would travel to the school and support the primary teachers. The organisation would vary from school to school on how this support was utilised. In most cases, the PE teacher would co-teach with the primary teacher and provide feedback and feed-forward to them in regards to their PE practice. Each term the primary teacher would usually change so that the PE teacher worked with a different teacher. It is essential to understand the formation of the SSP's as it is on this experience and knowledge that the *PE Partnership Programme* was based.

### The *KiwiSport* initiative

The Aotearoa New Zealand government introduced the *KiwiSport* initiative in 2009 as a response to the participation rates for secondary school age students showing a declining trend (Kolt et al., 2006; New Zealand Secondary Schools Sports Council, 2007). Between 2010-2014, the government budgeted for \$82 million to allow for greater opportunities and improved access to sport for children of school age in Aotearoa New Zealand. The three broad aims of the *KiwiSport* initiative were to increase participation, increase the sports opportunities available, and develop the skill level of students (Sport New Zealand, 2017). Funding was distributed through two methods, direct funding and the regional partnership fund. Direct funding was paid on a quarterly basis to schools based on the number of students on the school roll (Ministry of Education, 2014b). The funding approximately equated to \$13 per year 1-8 student and \$21 per year 9-13 student.

The regional fund was designed to complement the direct funding by encouraging schools, clubs, and community organisations to work in partnership to increase the opportunities available for students to participate in organised sport (Ministry of Education, 2014b). Sport New Zealand distributed the regional fund to their 17 regional sports trusts (RST) around Aotearoa New Zealand (Sport New Zealand, 2017). The allocation of funding was made to projects that were designated a priority by the RST and could ensure new or increased opportunities. Alternatively, a school, club or community organisation could apply to deliver a programme that

was deemed to fulfil the criteria. Funding was gained for the *PE Partnership Programme* through my successful application to the Counties Manukau RST.

It was my prior involvement with these two programmes (the *School Sport Partnership* programme and the *KiwiSport* Initiative), along with my knowledge and understanding as a PE teacher that contributed to the design of *PE Partnership Programme* central to this research.

### South Auckland

The research undertaken in this thesis was conducted in two schools situated in South Auckland, a region of Auckland City in the North Island of Aotearoa New Zealand.

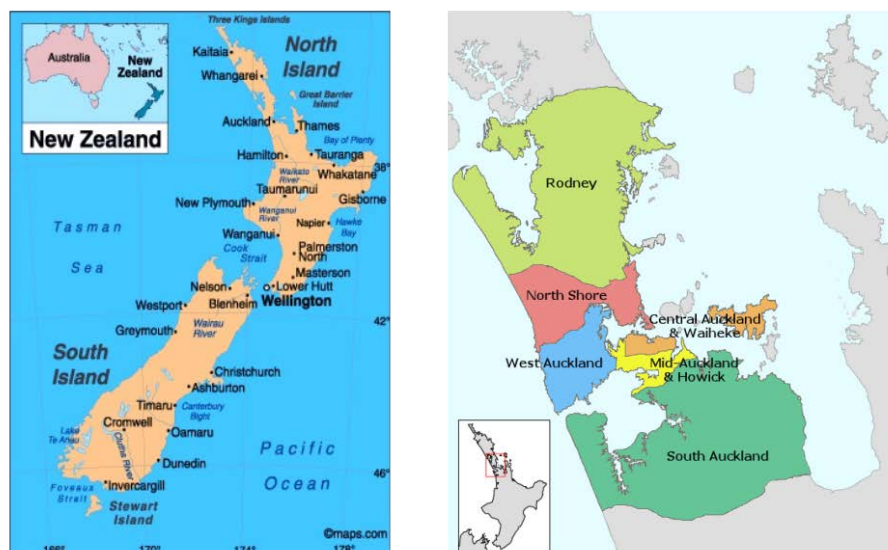


Figure 2: Map of Aotearoa New Zealand and map locating South Auckland

Auckland is the most populous area of Aotearoa New Zealand with approximately 33 per cent of the country's population residing in the city (Auckland Population, 2017). As a consequence, there is an incredibly diverse ethnic population with over 200 ethnicities represented in Auckland (Statistics New Zealand, 2014). Additionally, the socio-economic makeup of the city encompasses both ends of the spectrum from the markedly wealthy to the very poor. The highest income areas include the city centre and the North Shore; the lowest income areas comprise

Manukau City and parts of the Papakura districts (Statistics New Zealand, 2012). These two areas of low-income are located in the region of South Auckland.

Until the 1950's South Auckland was primarily a farming area until a new motorway encouraged the development of industry and low-cost housing. As a consequence of the job opportunities and cheaper housing, many Pacific people (mainly from Samoa, Tonga, Fiji and the Cook Islands) settled in this region. Today, South Auckland is Aotearoa New Zealand's most ethnically diverse urban area with 165 ethnic groups represented with the majority of the residents from a Polynesian or Māori cultural background (Statistics New Zealand, 2014). These Pacific and Māori communities are some of Auckland's most impoverished residents who are on the lowest incomes (Statistics New Zealand, 2017b). The recent economic and population growth of Auckland City has accentuated the social differences between the socio-economically wealthy and poorer regions of the city. House prices have increased significantly over the past five years with \$910,537 being the average price of an Auckland house and \$674,507 in South Auckland (Barfoot & Thompson, 2017)<sup>10</sup>. These prices equate to over ten times the house price to income ratio (interest.co.nz, 2017) which is used as an affordability index. As a consequence of the average house price in Auckland creeping up towards the one-million-dollar mark, Aotearoa New Zealand has been placed as number one on the International Monetary Fund's unaffordability housing list (International Monetary Fund, 2017) when house prices have grown faster than income.

State housing dominates the type of housing available in South Auckland. The state housing system provides residents with low to moderate incomes the opportunity to rent housing at a low-cost. These houses are mostly owned by the Crown and managed by the Housing New Zealand Corporation. However, currently, there are not enough state houses to provide accommodation for all the residents who require state housing. Families are turning to private rentals which are increasing in price rapidly; currently the average is \$488 per week (Barfoot & Thompson, 2017) due to the high demand and also the escalation in the cost of homeownership. The

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<sup>10</sup> October data taken from Aotearoa New Zealand real estate company Barfoot & Thompson. (2017). *Market Report: October 2017 suburb report: Rent, house prices and yield*. Retrieved from <https://www.barfoot.co.nz/market-reports/2017/october/suburb-report>.

increase in house prices and the low annual income has affected many families in South Auckland, and many are living in poverty. UNICEF New Zealand (2017) has defined child poverty in Aotearoa New Zealand as children living in households where less than 60% of the median national income is earned (approximately \$38,280 per annum) (Statistics New Zealand, 2017b). According to the 2016/2017 report conducted by Amnesty International (2017), nearly one-third of children in Aotearoa New Zealand are living below the poverty line.

In South Auckland, approximately 26 per cent of the population is under the age of 15 years old, with Pacific families larger than average (Statistics New Zealand, 2014). The situation is emphasised further when the more recent Household Economic Survey (Income) 2015 (Statistics New Zealand, 2017a) revealed that nearly one-third of households spend one-quarter of their income on housing expenses. The media has exposed hundreds of families living in poverty, living in cars or living in one bedroom motel rooms, as they cannot afford to rent places or often rentals are not available (Jones, 2016). As a consequence, child poverty is an increasing problem with hundreds of children attending school hungry and sleep deprived due to sleeping on couches or in garages with numerous other children ("Desperate Saitu family share story of child poverty in South Auckland," 2016).

Due to the high proportion of the South Auckland population living in socio-economic deprivation, there has been a significant impact on health. Counties Manukau Health Board (the health board responsible for the majority of South Auckland) has reported a high rate of illnesses linked to overcrowding and the poor quality of housing in which families are forced to live. It has been reported that up to 100 children a day are admitted to hospital with poverty-related illnesses (Child Poverty Action Group, 2017). Conditions related to smoking, obesity, poor nutrition, lack of physical activity, misuse of alcohol and other health issues are more prevalent for people living in poverty (Counties Manukau Health Board, 2016). These factors are seen to be impacting the children in detrimental ways which in turn affects their attitude and aptitude for school.

Approximately 71 per cent of primary and secondary schools in South Auckland, are classified as either decile 1 or 2 (Education Counts, 2014). The decile rating

system which currently operates in Aotearoa New Zealand classifies schools according to the extent to which a school draws their students from low socio-economic communities (Ministry of Education, 2011). Decile 1 schools have the highest proportion of students from the low socio-economic communities whereas decile 10 schools have the lowest percentage of these students (Ministry of Education, 2011).

The media often describes South Auckland as an area that is socio-economically disadvantaged, ‘rough’, and having a high crime rate. The negative connotations refer to the high street crime rates and the fact that many of the youth are involved in gang activities. Two recent headlines from the *New Zealand Herald* newspaper include, “Shopkeeper bashed-tobacco stolen in South Auckland robbery” (2016), “Person in hospital after shooting in South Auckland, gunman on the loose” (2017).

Despite the many negative connotations expressed regarding the area of South Auckland, there are many positive factors. One of these positives is that many of Aotearoa New Zealand’s top sports stars hail from South Auckland; these include Olympic Champions Sir John Walker and Dame Valerie Adams. Also, many of the rugby All Blacks and Black Ferns, netball Silver Ferns, and rugby league superstars were born and raised in this area of Aotearoa New Zealand. This region has an exceptionally strong sporting tradition within the country and provides youth with role models to aspire to emulate. From my experience as a teacher in South Auckland, I have seen many students aspire to be one of the next generations of sporting superstars to represent their country. Their desire had a positive impact on their engagement in PE lessons and also their involvement in co-curricular sports teams.

### **Thesis overview**

Chapter Two, ‘Literature Review’ reviews both the national and international literature and research surrounding four areas pertinent to this research. Firstly, it explores the issues that are affecting primary school teachers’ in their delivery of PE in Aotearoa New Zealand schools and secondly, the changing nature of who is delivering PE within Aotearoa New Zealand primary schools. The third section focuses on teacher knowledges and the teacher as a learner. Finally, this chapter

examines the factors that contribute to effective professional learning both in general education terms and PE.

The 'Methodology', Chapter Three, follows the literature review. A description of the methodological approach adopted for this research and the methods for data collection used to answer the research questions is outlined. A case study approach was utilised with lesson observations and field notes to identify any changes in teaching practice as a result of the PL programme. Also, individual and group interviews were used to determine the teachers' views and experiences of the programme introduced to the two schools.

The 'Findings', Chapter Four, presents four main themes that have transpired from the research. The themes are first, how the teachers' background stories have impacted on their attitude towards PE. Secondly, it discusses the issues surrounding the PL regarding the nature of the programme and the delivery process. The third theme is concerned with the participants' attitudinal and pedagogical changes towards PE. The final section examines the changes in PCK and PE-CK.

In Chapter Five, 'Discussion' the findings are drawn together, and the main themes are discussed that have emerged from the research. Each of the themes are illustrated through reference to the data collected and is then compared and contrasted to the existing literature both originating from Aotearoa New Zealand and internationally.

The 'Conclusion', Chapter Six, provides a summary of what this research study has attempted to address. A synopsis of the study presents an outline of the *PE Partnership Programme* and how it was put into practice. Also, the design of the research and a summary of the findings are presented. Additionally, I present the limitations of the study and three features that are imperative for effective PL practice and a proposal as to how these could be included into PL of the future. The chapter ends with the final thoughts from the research.



## **Chapter Two: Literature Review**

The following chapter reviews the findings from international and national literature on the following four areas. The first section examines factors that are shaping the current situation of Physical Education (PE) in Aotearoa New Zealand primary schools. The second section will consider who is teaching PE in primary schools in the current context. The third section focuses on teacher knowledges in relation to pedagogical content knowledge (PCK) and pedagogies used for delivering primary PE. The final section considers the concept of professional learning (PL), with factors regarded as effective. Each of these areas is reviewed broadly, and also in the context of the primary school PE setting.

### **PE in Aotearoa New Zealand primary schools**

PE has been a part of the Aotearoa New Zealand school curriculum since 1946; however, there is concern about the quality of the PE that occurs in primary schools (Dyson, Cowan, Gordon, Powell, & Shulruf, 2018; Penney et al., 2013; Petrie & Atkins, 2017; Powell, 2015). This first section will critically examine three key issues that appear to affect the schools and teachers of Aotearoa New Zealand primary schools. Firstly, the marginalisation of PE within primary schools, and secondly, how the confusion around the use of PE, physical activity, and sport terminology affects the understanding of PE. The third section will highlight the issues surrounding the provision of high-quality primary PE programmes. These key issues are intertwined with each other, making this a complicated situation for primary schools and their generalist classroom teachers to contend with if they are to ensure the quality provision of PE.

#### The marginalisation of PE within primary schools

The marginalisation of PE in schools around the world and especially in primary schools is a serious concern (for example for example Dyson et al., 2018; Jess, Pickup, & Haydn-Davies, 2007; Pagnano Richardson, 2011; Petrie, 2010a; Sheehy, 2011). Governments throughout the globe produce curriculum policy documents advocating for children to be taught PE within the school curriculum. The

production of such documents indicates importance placed on the subject/learning area of PE by many national governments.

A survey conducted by Marshall and Hardman (2000) financed by the International Olympic Committee (IOC) in 1998/1999 examined the state and status of PE in schools worldwide. The findings of this survey identified that school PE was in a precarious position internationally due to the differences between policy and reality. The importance of PE portrayed by national governments was not being reinforced by the reality of what was happening in schools around the world and Aotearoa New Zealand. Despite PE being a compulsory core curriculum subject in Aotearoa New Zealand since 1946, the significance of the learning area has been undermined and undervalued in many schools and in some cases has become an optional subject after year 10 (Marshall & Hardman, 2000).

Research conducted by Hardman (2006), James (2011) and Pagnano Richardson (2011) supports the work of Marshall and Hardman and has recognised reasons why PE has continued to be marginalised in schools. As early as 1964, Henry stated “that in order for PE to be considered an academic subject, it needed to be an organised body of knowledge that consisted of content that was theoretical and scholarly, rather than technical and professional” (as cited in as cited in James, 2011p. 15p. 15). PE is considered a non-academic subject and, therefore, not seen as important as other subjects. PE not being considered an academic subject and, therefore, having a lack of value was nothing new according to James (2011). This notion was also supported by Griggs (2017) who stated that the philosophical thought that considers mental activity to be superior to physical activity has resulted in the marginalisation of PE within the school curricula.

PE was proposed as an academic subject in Aotearoa New Zealand in 1963 by lecturer Sam Lewis at Canterbury University (Stothard, 1996 as cited in Stothard, 1996 as cited in Bowes & Bruce, 2011). It is disappointing to note it was not until the 1980s that PE was recognised as an academic subject in the senior school subject curriculum documents. In spite of this recognition, PE was not assessed as a School Certificate subject at year 11; with students only required to complete a set number of hours, as part of their junior programme to meet the requirements for

the School Certification (Bowes & Bruce, 2011). PE is currently seen as an academic subject in many countries with students able to follow academic pathways through school and into universities. In Aotearoa New Zealand, PE is available at *National Certificate of Educational Achievement* (NCEA) Level 1, 2, and 3, scholarship and as a university entrance subject.

Prior to PE gaining academic status in secondary schools, PL was common in primary schools, however, once PE became an accredited learning area this changed. PL became more critical for the secondary sector due to the increased value, which resulted in PL becoming minimal in the primary schools. In primary schools, the increase in status of secondary PE contributed to the further marginalisation of the subject.

The second contributing factor to the marginalisation has been that students and teachers of other subjects have viewed PE as a subject that is not important (Hardman, 2006). For many, PE teachers are not seen to be ‘real’ teachers (James, 2011). These notions have reinforced the stereotypical representation of PE teachers as “those who can, do; those who cannot, teach; and those who cannot teach, teach PE” (Sheehy, 2011). The perceptions of parents are also connected with the teachers’ and students’ opinion of PE not being important. The marginalisation of PE is further compounded by the parents’ prior experience of PE. Parents have the power to influence their children’s attitude towards the subject and encourage them away from opting for a PE pathway (Sheehy, 2011).

Another contributing factor that has relevance for Aotearoa New Zealand primary schools was the introduction of *National Standards* (Ministry of Education, 2009). The place of PE within the primary curriculum has become more and more marginalised with more importance being placed on the high-stakes testing of literacy and numeracy (Dyson et al., 2011; Hipkins et al., 2011; Petrie & Lisahunter, 2011). Penney et al. (2013) in their report into PE and Sport in Aotearoa New Zealand primary schools claimed:

*Physical education is currently not an educational priority in national arenas. Amidst National Standards, primary school Principals and teachers are feeling pressure to focus attention on literacy and numeracy. In this situation, curriculum time for PE*

*can be compromised, and other curriculum areas may similarly be prioritised for investment in PD. (p. 42)*

The implications of *National Standards* and standardised testing on primary teachers and PE are illustrated in the previous chapter.

### Confusion around the use of PE, physical activity and sport terminology

The terms PE, physical activity, and school sport (often referred to as just sport) are all used interchangeably within primary schools in Aotearoa New Zealand and Australia (Culpan, 2005; Morgan & Hansen, 2007; Petrie, 2016a). However, the definitions for PE, physical activity, and school sport suggest quite distinct differences between the three terms. Health and Physical Education (HPE) is the curriculum learning area referred to in Aotearoa New Zealand schools' curriculum, not Physical Activity or Sport. The essence of PE according to the Ministry of Education (MoE) in the New Zealand Curriculum (NZC) is:

*In physical education, the focus is on movement and its contribution to the development of individuals and communities. By learning in, through and about movement, students gain an understanding that movement is integral to human expression and that it can contribute to people's pleasure and enhance their lives. They learn to understand, appreciate, and move their bodies, relate positively to others, and demonstrate constructive attitudes and values. This learning takes place as they engage in play, games, sport, exercise, recreation, adventure, and expressive movement in diverse physical and social environments. Physical education encourages students to engage in movement experiences that promote and support the development of physical and social skills. It fosters critical thinking and action and enables students to understand the role and significance of physical activity for individuals and society.*

(Ministry of Education, 2007a, p. 23, p. 23)

In contrast, physical activity is a broad term referring to all bodily movement that uses energy. Physical activity can be defined as “doing at least 30 minutes of brisk walking or moderate-intensity physical activity (or equivalent vigorous activity), for at least 10 minutes at a time, at least five days a week” (Ministry of Health, 2016). Additionally, according to the UK Association for Physical Education (2015) physical activity can include indoor and outdoor play, work-related activity, outdoor and adventurous activities, active travel (for example, walking, cycling,

rollerblading, scootering) and routine, habitual activities such as using the stairs, doing housework and gardening.

Conversely, school sport or co-curricular physical activity opportunities are activities that occur “within schools mainly outside curriculum time-before and after school, at playtime and lunchtime, and in short breaks between planned learning activities. Co-curricular programmes in schools may include organised sport in which students have the opportunity to participate and compete” (Ministry of Education, 2007b, p. 77). The ‘school sport’ programme has the potential to develop and broaden the foundation learning that takes place in PE. It also forms a vital link with ‘community sport and activity’ (Association for Physical Education, 2015).

Despite the clear differences, the terminology is used interchangeably and often used in the wrong context, which results in confusion. Culpan (2005) suggested at the level of the MoE, and in policies, there was ‘muddled thinking’ concerning the terminology. If the definitions surrounding PE and the place of sport and physical activity within PE at the Ministry level are confused and misleading, there is the potential for confusion amongst teachers regarding what the intent of the curriculum is, and the intended outcomes when the curriculum is implemented (Dyson et al., 2011; Petrie & Lisahunter, 2011). Equally, the Ministry of Health (MoH) and Sport New Zealand have exacerbated the misunderstandings after the release of recent documents where the terminology was confused. Pope (2011) described this as the substitution model when terms are used interchangeably and supported by wider perception; also when the terms are not entirely understood. The practice of teachers interchanging the terms was also found in the research conducted by Penney et al. (2013).

Petrie and Lisahunter (2011) suggest that this confusion may be explained by the number of policies that were released to schools subsequent to the New Zealand Health and Physical Education (NZHPE). The release of this multiplicity of reports and guidelines for PE, physical activity, and sport has confused teachers, especially in primary schools, concerning what they are being asked to deliver in their ‘PE lessons’ (Petrie & Lisahunter, 2011). If the generalist teachers do not understand the

difference between the three terms, they cannot make judgements around the documentation that arrives in their schools (Petrie & Lisahunter, 2011). The teachers' lack of understanding is plausible when the MoE, MoH and Sport New Zealand have interchanged the terms in an ad hoc fashion, and added to the confusion.

The interpretation as to what PE is can be a problem, as all teachers are individuals and all have their perspectives, attitudes and beliefs around their teaching of PE (Petrie, 2008) in many cases, it is a non-specialist PE teacher who is in charge of the learning area. As a result, many different interpretations as to what constitutes PE in primary school occur. Many primary school teachers use the term PE to encompass a range of activities; these may include the planned and unplanned opportunities in class time, syndicate sport, daily fitness and skill-based PE (Petrie, 2008). Some generalist teachers understand PE in the primary school to be about getting students fit, preparing them to play in teams to represent the school at inter-school competitions or providing fun activities. With confusion and uncertainty being the case in primary schools, it has become clear that providing quality PE to students is a challenging and complex issue.

#### Providing high-quality primary PE programmes

Providing 'quality' or 'high-quality' primary PE programmes has emerged as an issue in many countries around the world. Numerous researchers are posing the question and enquiring to establish what constitutes 'quality' PE programmes in schools. In Aotearoa New Zealand (Dyson et al., 2011; Penney, Brooker, Hay, & Gillespie, 2009; Stirling & Belk, 2002) in the UK (Casbon, Walters, & Penney, 2003; Flintoff, Foster, & Wystawnoha, 2011; Sloan, 2010) and in North America (DeCorby, Halas, Dixon, Wintrup, & Janzen, 2005; Gabbard, 2001) all have investigated this question although not all have been with a focus on primary PE. It is apparent that despite a considerable amount of research undertaken, there seems to be little consensus on what is considered 'quality' or 'high-quality' PE. The definition of the concept 'quality' appears to be dependent upon your location, and the philosophy of the curriculum followed in different educational contexts (Penney et al., 2009).

It is clear, even with the lack of consensus, common themes have appeared that contribute to a definition of quality PE; these include curriculum, pedagogy and assessment. For the purpose of this research attention will focus on the need for a curriculum (programme of study) that is flexible to include a range of learning contexts (UNESCO, 2015); and the use of effective pedagogies (Ministry of Education, 2007a) as detailed in the NZC. UNESCO (2015) maintained that for curriculum and pedagogy development, support is required to ensure teachers are well-qualified and have access to PL throughout their career.

In spite of the numerous curriculum reforms which have taken place over time, the traditional influences of the annual athletics and swimming gala and inter-school competitions are highly valued (Penney & Dinan Thompson, 2017) especially in Aotearoa New Zealand and Australia. These traditional competitions are seen to be key drivers to the content and structure of the PE through sports-based and multi-activity orientated programmes (Petrie, 2008) and are reflected in the seasonal patterns of participation in sport seen in the primary PE programmes. Furthermore, primary PE lessons often resemble a watered-down version of a secondary PE programme (Griggs, 2017).

Defining quality PE is a complex process that comprises many facets and interpretations. To contribute to the research associated with the provision of quality PE, this study examined two of the four components of quality PE-effective pedagogies and effective PL.

### **Who is delivering PE in primary schools?**

Traditionally, internationally, PE in primary schools has been delivered by the classroom teacher (for example for example Dyson et al., 2018; Morgan & Bourke, 2008; Penney et al., 2013; Petrie, 2010a). These authors have highlighted that it has become apparent recently that the providers of PE in primary schools are changing. In Aotearoa New Zealand changes have been observed. In some schools, it is the generalist classroom teachers, in others, it is a specialist PE teacher, and in some, a combination of a specialist and a generalist can be found. Furthermore, it is evident from research (Dyson et al., 2016; Penney et al., 2013) that a considerable number of primary schools are utilising external providers-coaches from regional sports

trusts, national governing bodies or sporting organisations to deliver both PE lessons and co-curricular sports sessions. The intention of this section is not to provide extensive detail regarding each of these scenarios, but to provide sufficient information for the reader to gain an understanding of the changing nature of PE regarding who can be found delivering the PE lessons in schools.

#### The use of generalist teachers to deliver primary PE

In primary schools in Aotearoa New Zealand the generalist classroom teacher is typically responsible for the delivery of all NZC learning areas, as explained in Chapter One. It is mainly these teachers that teach PE; they hold a broad qualification in teaching but typically do not have a qualification in PE (Cowley, Hamlin, & Grimley, 2011; Penney et al., 2013). The practice of the generalist teacher teaching PE is also common in the UK and Australia, but this is contrasted in the USA, where many primary aged students are taught PE by specialists either based at the school or who work as itinerants in the school districts (Graber, Locke, Lambdin, & Solmon, 2008).

Differing views can be seen in the literature as to who is regarded as the best-suited people to teach PE in primary schools. Talbot (2008) is clear that the best-placed adults for teaching PE are the class teachers. This idea is supported by Jones (1992) who agreed that it is the class teacher due to the relationships that have been developed and the holistic view the teacher can have (as cited in Sloan, 2010, p. 270, p. 270). In the same vein, Petrie (2011) argued that despite the lack of training and preparation, the generalist classroom teachers might be in a better position to teach PE due to their knowledge of the students. The lack of training and preparation, however, has resulted in a lack of confidence, which has resulted in issues for these teachers.

#### *Generalist teachers' confidence to deliver PE*

During the past twenty years a considerable amount of research around the world has been undertaken highlighting the low levels of teacher expertise and the low levels of confidence of generalist classroom teachers teaching PE (Coulter & Woods, 2012; Dyson et al., 2016; Gordon, Dyson, Cowan, McKenzie, & Shulruf,

2016; Jess, Keay, & Carse, 2014; Petrie, 2010a; Sloan, 2010). Other research has examined the negative attitudes and perceptions of teachers towards teaching PE (Dyson et al., 2011; Faucette, Nugent, Sallis, & McKenzie, 2002). All these studies point to the main reason behind the low levels of confidence in generalist classroom teachers being that they believe they are not equipped with the knowledge and the skills to teach PE.

Warburton (2000) stated that “quality PE depends on well-qualified educators and that there is a need to invest in initial and in-service professional training and development for all educators” (as cited in Sloan, 2010, p. 275, p. 275). The research carried out by Morgan and Bourke (2005) in New South Wales found that many generalist teachers believed that they required more PL in PE. A correlation was also found between the teachers’ training they had received and their levels of confidence in teaching PE.

International studies have further found that generalist primary school teachers are inadequately prepared to teach PE when entering the teaching profession (Carney & Winkler, 2008; lisahunter, 2006; Morgan & Bourke, 2005, 2008; Morgan & Hansen, 2008; Pickup, Haydn-Davies, & Jess, 2007). Dyson et al. (2011) concurred that generalist teachers in Aotearoa New Zealand graduate university with limited knowledge and experience in PE. A consequence of literacy and numeracy becoming ‘high stake’ learning areas, is that the universities delivering initial teacher education (ITE) programmes have introduced policies to decrease the number of hours dedicated to the delivery of PE in primary teacher trainee programmes. Teacher trainees now receive between 10 and 36 hours over a three-year course (Dyson et al., 2011; Petrie, 2008). It is noted by Morgan and Bourke (2005) that it is possible to graduate and begin teaching in Australia without any formal training in PE. This provides a further example of how PE is again being marginalised.

Limited training impacts on the generalist teachers as many find themselves not feeling confident enough to teach PE, due to having an insufficient subject-specific or PE pedagogical knowledge. Also, once teachers are in-service, there is a lack of PL opportunities to support them (Dyson et al., 2011; Petrie & lisahunter, 2011),

and in Aotearoa New Zealand there is no advisory service available for consultation. A policy change in 2009 by the government removed the HPE curriculum advisors as the funding was redirected away from curriculum support programmes (Petrie & Lisahunter, 2011). The only available resource for primary classroom teachers now appears to be the subject association Physical Education New Zealand (PENZ) (Petrie & Lisahunter, 2011) and an array of internet-based advice and resources, together with conversations generated through Twitter and Facebook. Alternatively, teachers form cluster groups to help themselves or engage the many external agencies approaching schools with offers of resources and support.

Generalist teachers need the knowledge and confidence if they are to teach quality PE lessons that allow students to fulfil the requirements of the NZC. Morgan and Bourke (2008) suggested that if the confidence of the primary non-specialist were developed, then this would help to alleviate teacher avoidance in areas such as PE. Linked with the belief of being ill-equipped to teach PE are the attitudes that some generalist teachers hold regarding the subject. These negative attitudes displayed significantly impact on the quality of delivery and effectiveness of the PE programme and the attitudes of the students in their classes. Morgan and Bourke (2004) found that when teachers displayed negative attitudes towards PE, this significantly impacted on the quality of the PE programmes. Likewise, teachers who held these discouraging attitudes were more likely to avoid delivering PE lessons and provide uninspiring programmes; consequently, the students' attitude and perception of PE was influenced by the teachers' disposition. It has been demonstrated that teachers' beliefs and perceptions of PE stemmed from their personal experiences of PE when they were at school. Therefore, if these were positive experiences then it is more likely they will have a positive attitude towards the learning area and vice versa (Morgan & Bourke, 2008).

Curriculum knowledge is required when planning a school PE curriculum; teachers need to be aware of the learning objectives and intentions when deciding the most appropriate learning context to achieve these. The individual curriculum documents of 1999 (Ministry of Education, 1999) provided direction concerning the underlying concepts, the key areas of learning, and the achievement objectives for

each learning area. The guidance enabled teachers to use the detailed and prescriptive information to develop their school programmes of study, resulting in many schools' programmes being very similar.

The descriptive nature of the NZC document has meant schools and teachers can interpret it in their own way. The flexibility afforded by the NZC should mean the ability for teachers to develop diverse and meaningful programmes and to design programmes that meet the needs of their students, instead of students in general. The lack of direction and prescription for the non-specialist primary teacher who has limited knowledge and confidence in teaching PE can be confusing and overwhelming when trying to make sense of what to teach and how to teach it (Dyson et al., 2011; Petrie & Lisahunter, 2011). With a broad range of achievement objectives that need to be covered, it has proven to be a challenge for the specialist PE teacher let alone a generalist classroom teacher (Dyson et al., 2011).

Comparisons are also found in Australia (Morgan & Bourke, 2005) and the UK (Griggs, 2007; Jess et al., 2007) where generalist teachers struggle to implement curriculum change without clear advice and support. Thus, while Jones (1992), Petrie (2011) and Talbot (2008) advocate that the generalist teacher is the most suitable person to be teaching PE in the primary schools, it is clear that these teachers face considerable difficulties in successfully achieving the outcomes of the NZC. As a consequence of generalist teachers lacking the confidence to deliver PE lessons, programmes and interventions have been created and implemented in an attempt to alleviate these issues.

#### The use of specialist teachers to deliver primary PE

The use of specialist PE teachers in secondary schools is a common feature but in primary schools not so much. Anecdotal evidence, however, in Aotearoa New Zealand has appeared to show that more primary schools are employing specialist PE teachers often in combination with the role of the teacher in charge of sport (responsible for organising and accompanying the teams to compete in the inter-school competitions) (Petrie & Atkins, 2017). These teachers are classified as specialists due to completing an undergraduate degree in sport and recreation and

then having completed a graduate diploma to allow them to teach in schools. These teachers tend to be secondary trained or overseas teachers, as tertiary institutions in Aotearoa New Zealand do not offer a primary teaching qualification that specialises in PE.

The issue of the PE specialist in primary schools has proven to be contentious as it depends on who is regarded as the specialist. As Flintoff (2003) claimed, secondary PE specialists who are familiar with teaching single-sex groups and delivering the secondary curriculum may not be the best solution to teach PE in primary schools. Also, the recent practice of external providers being utilised in many primary schools has resulted in some teachers regarding these providers as specialists as they possess more knowledge than the teachers around sport but, not necessarily concerning PE (Dyson et al., 2018; Powell, 2015). The use of external providers will be discussed later in this section.

There are examples from around the world where specialist PE teachers have been used to deliver primary PE sessions, with two such exemplars from Australia and the USA. The first, is taken from Queensland, Australia, where specialist PE teachers were employed to cover the non-contact time of teachers (DinanThompson & Penney, 2015). PE is timetabled in the non-contact time of teachers, meaning the classroom teacher is not available for the PE lesson, as this is their time for planning, marking and carrying out other tasks. The organisation of the programme in this way has meant limited communication between the classroom teacher and the PE specialist about students' learning or progress in this lesson (Brooks & DinanThompson, 2015). Furthermore, the specialist teacher may not be solely employed in one school but may have worked across two or three schools. Issues surrounding the sense of belonging within a school and being seen on equal terms with the other teaching staff were identified for these teachers (Brooks & DinanThompson, 2013, 2015). Despite the specialist teachers delivering the programme in the non-contact time of teachers, Brooks and DinanThompson (2015) reported a reduced time allocation for these lessons due to the increased time for literacy and numeracy, further marginalising PE within the state. A mix of outcomes were noted in this programme which need to be recognised when planning a future PL opportunity.

The second example of specialist PE teachers delivering primary PE is taken from the Sports, Play and Active Recreation for Kids (SPARK-PE<sup>11</sup>) research undertaken in America, where three scenarios were compared; firstly, schools where specialist teachers were employed; secondly schools where the specialists provided PL for the generalist teachers and thirdly, schools where it was business as usual, no intervention is put in place. Sallis et al. (1997) found that students who were taught by specialists demonstrated higher levels of achievement in skill performance, fitness and physical activity levels compared to students taught by generalist teachers.

It is pertinent to note that achievement in American PE lessons contrasts significantly with the learning intentions of the NZC. In America, more emphasis is placed on fitness and physical activity levels with students measured against standards to determine achievement and progress. The SPARK-PE research concentrated on the measurable components of fitness, skill level and activity level ascertained through quantitative data. The NZC contrasts this viewpoint and places importance on the socio-cultural principles and beliefs as the vision to be encouraged, modelled and explored. The HPE achievement objectives in the NZC uses words such as describe, develop, demonstrate, participate and identify. As a result, these are assessed through alternative methods such as observations and teacher judgements rather than the quantitative methods favoured in the USA. If this type of research were to be conducted in Aotearoa New Zealand, contradictory findings might be determined due to the difference in the focus of the curriculum.

It is evident from the difficulties that have been highlighted that the use of specialist PE teachers in primary schools may not be the answer to rectifying the issues concerning primary PE. The following section examines the use of external providers to deliver PE in primary schools. External providers are often regarded as ‘specialists’ or ‘experts’ by teachers (Powell, 2015) and for this reason, are utilised in PE lessons.

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<sup>11</sup> SPARK – Sports, Play and Active Recreation for Kids programme was developed at San Diego State University in the late 1980’s for elementary and middle schools in the USA with the goals of combating rising levels of childhood obesity. The programmes have three features: an active curriculum, staff development and follow-up support.

### The use of external providers to deliver primary PE

In recent times there has been an increase in the number of external providers offering their services to schools in primary schools both internationally and within Aotearoa New Zealand (Hurley, 2016; Penney et al., 2013; Powell, 2015). In the context of primary school PE, this refers to the school either employing or through funding gaining the 'expertise' of sports organisations or National Governing Bodies (NGB) to deliver PE and sports programmes within the school programme.

The influx of external providers (Petrie, Penney, & Fellows, 2014) stems from the availability of funding and the awareness of issues faced by the schools. The work of Powell (2015) and Petrie (2016a) has suggested that the availability of government funding for schools and to sports organisations has in part been responsible for the increase in external providers delivering PE in primary schools. One of the funding streams available is *KiwiSport* where national sports organisations, regional sports trusts, and sports clubs can apply for financial assistance provided by Sport New Zealand to deliver programmes within the school environment either in curricular or co-curricular time. To obtain the funding and maintain it, these organisations need to prove they are involved with the community and have increased the number of participants (school-age children) taking part in their activities.

The external providers are arguably taking advantage of the issues faced by schools, including the low confidence levels of generalist classroom teachers, the lack of equipment schools may have and the need for schools to provide planning and preparation time for teachers in primary schools. The introduction of release time for primary teachers during the day known as classroom release time (CRT) in Aotearoa New Zealand has required school Principals to be creative with the timetables to accommodate these requirements. As PE is often seen as a curriculum area of less importance and having less academic priority than other subjects, one option for Principals has been to increase the use and employment of these external providers in schools to cover PE lessons. The situation of using external providers has been occurring in England for some years since the introduction of the *Physical Education, Sport and School Club Links* (PESSCL) (Department for Education and Skills (DfES) & Department for Culture Media and Sport (DCMS), 2003) initiative.

In England, this was seen initially to be a good choice by school Principals to have someone else take the lessons to release the teacher for planning, preparation and assessment time (Blair & Capel, 2008; Griggs, 2007, 2010).

Concerns amongst the English PE profession (Lavin, Swindlehurst, & Foster, 2008), indicated that PE was becoming a subject being delivered by staff or other adults who do not hold a degree qualification in PE or are not qualified as teachers. Also, the quality of the programmes being provided was questioned. As a result, Lavin et al. (2008) undertook a research project to determine the extent to which adults who were not teachers were delivering PE. It was generally accepted that these coaches/adults have the specialist knowledge but the expertise around behaviour management, pedagogy and assessment was the main concern (Lavin et al., 2008).

The concerns arising in England are now replicated in Aotearoa New Zealand. The external providers have identified a niche in the market to promote their sport or their business. In many cases, equipment is provided to schools that they cannot afford to purchase from budgets, and moreover, the use of the external providers allows the classroom teacher their statutory CRT (Petrie, Penney, et al., 2014). A number of schools in Aotearoa New Zealand have seen this offer by the external providers as an opportunity for PE to be delivered by an 'expert'. The generalist teachers see the external providers as experts (Gordon et al., 2016), in the sense that they have the knowledge concerning sports; however, concern has been raised about pedagogical approaches used and the alignment of the programmes with the NZC (Gordon et al., 2016).

Powell (2015) suggests that the default use of external providers to deliver PE de-professionalises and de-skills teachers in their role as a teacher of PE. The use of coaches to upskill teachers could be interpreted to mean that the PE knowledge and understanding of the coach is superior to that of the teacher's (Blair, 2017). Teachers have expert knowledge of their students (for example their learning needs, family situations and their (dis) abilities), yet the external providers who have very little knowledge of the students or the curriculum are given the responsibility of teaching the PE lessons (Powell, 2015). Keay and Spence (2012) and Smith (2015)

argued that primary school teachers are becoming de-skilled due to the lack of opportunities to teach PE due to the use of coaches in schools being normalised.

It is evident from Aotearoa New Zealand researchers (Gordon et al., 2016; Penney et al., 2013; Petrie, 2016a) that students are often experiencing a simplified version of PE, not always representative of the NZC due to the external providers' lack of knowledge. Petrie (2011) from examining externally provided programmes noted that it appeared:

*... that many programmes and initiatives being offered to schools are developed and delivered by people with limited knowledge of curriculum, pedagogy, context or learners. In addition, the initiatives appear to often to be delivered as standardised programmes, with providers rarely identifying or adjusting programmes to meet specific needs of individual students, classes or schools. (p. 9)*

The narrowing of PE as a learning area (Petrie, 2016a) and governmental policy initiatives such as the emphasis on literacy and numeracy have provided institutional barriers that have further opened the door to external providers. This section has highlighted many weaknesses associated with the use of external providers within PE lessons. The following section examines programmes and initiatives where collaborations have been instigated between specialists and generalists in an attempt to improve the quality of PE in primary schools.

#### Combinations of specialists and generalist teachers to deliver primary PE

Extensive research conducted by Jess, Carse and Keay in Scotland has led them to believe that “supporting generalist class teachers’ PD in PE would, therefore, seem to be a key component of any future quality improvement agenda” (Jess, Carse, & Keay, 2017, p. 115115). The following section provides information on four initiatives where the specialists who are either PE teachers or university staff have collaborated with generalist teachers to provide PL and support to deliver PE lessons.

Chapter One detailed an example of such an initiative, the English School Sports Partnership (SSP) programmes as part of the Specialist Sports College (SSC) initiative, which provided a foundation for this research. In the SSP programme,

one of the six key objectives was “Primary Liaison: to establish and develop linked PE and sports development programmes for local primary and special schools, and support school/club links” (Flintoff, 2003, p. 233233). Specialist secondary PE teachers were utilised to provide PL for the primary teachers in this model. This objective was found to be challenging for many of the School Sport Co-ordinators (SSCo). As secondary trained teachers the SSCo had differing philosophies and methodologies from those of primary generalist teachers. Conversely, teachers who had experience in the primary or middle school sector found this less challenging (Flintoff, 2003). Research (Office for Standards in Education, 2011) carried out by Quick, Simon, and Thornton (2010) on behalf of the UK Department for Education found that generally the SSP’s were successful and particularly in the projects concerning primary liaison.

Despite the success of these programmes, they were disbanded in 2012 due to a change in the ruling party of the British government, who were aware that the model was expensive and unsustainable economically. However, in March 2013, the new Coalition Government introduced the Primary PE and Sport premium (Prime Minister’s Office, 2013) (their new policy for PE and school sport). The new policy was due to the claims that the investment in SSP and SSC had seen a decline in ‘traditional’ team games. The money available per school through the Premium was on average £9250 (approximately NZ\$18,000); this money was ring-fenced and provided directly to the Head Teachers who were accountable for the spending. The new policy has resulted in further changes for PE in primary schools in England.

In the schools researched by Jones and Green (2015) it was found that Head Teachers were more inclined to utilise the Premium to outsource primary PE than upskill or retrain the existing generalist teacher or the PE subject leaders. Two-thirds of the schools used the ‘generalist plus one’ model, where the ‘plus one’ was predominantly a sports coach or in some cases a specialist teacher. Only 10% continued to use the generalist teacher approach.

The second example is taken from Aotearoa New Zealand and a programme known as ‘EveryBody Counts’ (Petrie et al., 2013). The ‘EveryBody Counts’ project consisted of four teachers from two schools and three teacher educators from two

universities. The project was undertaken between January 2011 and January 2013, and it was situated in the two schools. Teachers took time to re-imagine HPE through examining their beliefs about HPE. Following many discussions concerning what was HPE and the different preconceptions each person held towards HPE the 'Everybody Counts' approach became the shared ethos of the group. As a consequence, the approach supported the teachers in identifying the learning first and then deciding which activities best supported the students to achieve this learning. The teachers became aware that because HPE had been re-imagined, the subject would need to be called something different, so the preconceived ideas were not tied in to 'doing things differently' (Petrie, Burrows, & Cosgriff, 2014). A significant finding was to identify the conditions required for reflection and innovation (Petrie et al., 2013). Two conditions ascertained were time-time to talk, to think, to discuss, to debate and to imagine; and secondly having respectful partnerships where all members of the group share their expertise. These two findings have significance to the research in this thesis. Petrie et al. (2013) reported on the success of university staff and teachers working collaboratively together to support and sustain curriculum and pedagogical change in primary HPE.

Scotland has provided the context for the third example of an initiative where specialists worked collaboratively with the generalist primary teachers. As a consequence of the devolution of Scotland in 1999, considerable change took place within the Scottish education system. Of consequence for PE was the development of the Developmental Physical Education Group (DPEG) which was tasked to deal with the concerns raised about the low physical activity levels and the quality of primary PE (Jess & McEvelly, 2015). There is insufficient space here to provide a detailed description; therefore, a brief outline of the initiatives is provided with more information available in the Jess and McEvelly (2015) article.

The first initiative by the DPEG was 'Basic Moves': a PE approach for children aged five to seven to develop fundamental movements along with cognitive, social and emotional learning which would act as a foundation for lifelong physical activity. Initially, 'Basic Moves' was as a small-scale, localised programme, however, due to increased exposure and changes to the national PE developments it expanded to a country-wide programme in March 2004. When reflecting on the

'Basic Moves' programme, the DPEG discovered weaknesses which included the group taking on the role of experts and not speaking to teachers about their needs but speaking for them (Jess & McEvelly, 2015). As a result, many of the stakeholders and teachers felt excluded from the process. Adaptations were made in an attempt to rectify the weaknesses of the programme which included a tutor programme to decentralise and customise the approach to more situated, local contexts. Valuable lessons were learnt by facilitators from this PL programme as it was apparent that the leaders of the 'Basic Moves' approach had fallen into the trap of short, one-off, off-site courses that have little impact on the participants (Jess & McEvelly, 2015).

The second part of the Scottish project was the introduction in 2006 of the *Postgraduate Certificate in 3-14 Physical Education* in conjunction with the Universities of Edinburgh and Glasgow. The Masters level qualification was set up to enable preschool and primary teachers to develop a specialism in PE with the aim of building confidence and competency in teaching PE (Jess & McEvelly, 2015). The success of this qualification which was free to all registered teachers was clear, with over 500 teachers enrolled in the first five years (Jess, 2012; Jess & McEvelly, 2015). Jess and Dewar (2008) claimed that this unique continuing professional development (CPD) opportunity had created a new professional expertise that could change the face of primary PE throughout all parts of Scotland. It would appear that further investigation is required to determine if this type of intervention through teachers attaining additional qualifications is a practical way to develop confidence and competency in teaching PE.

The final example is taken from Western Australia, a project known as *Externally Provided Physical Activity Programmes* (EPPAPs). This intervention was delivered over two terms, for two lessons a week, each for 60 minutes. A specialist PE teacher delivered the lesson according to the standardised guidelines established by the specialists. The programme ensured that students were provided with expert content delivery and it also served as important PL for the teachers, due to them being able to observe the specialist and receive guidance (Whipp, Hutton, Grove, & Jackson, 2011). PL opportunities in this form have been shown in existing research to improve generalists' beliefs in their ability and their teaching practices (Faucette et

al., 2002). The research conducted by Whipp et al. (2011) found that some teachers' beliefs and attitudes changed due to the intervention. However, further investigation was thought to be needed as the students' perceptions of the initiative were not measured, also longitudinal research was desirable to determine whether these positive beliefs and attitudes brought about sustained changes (Whipp et al., 2011). Programmes of this type may be a positive example as they could provide PL for the classroom teachers. It combines the EPPAP's knowledge of PE with that of the classroom teacher regarding the students, pedagogy, and assessment. This example has been shown to improve the generalist teachers' beliefs about their practices in teaching PE (Flintoff et al., 2011; Mackintosh, 2012).

These examples where specialists have collaborated and operated together with generalist teachers have highlighted many strengths in the programmes, but, likewise has drawn attention to issues and weaknesses. Despite these limitations, the literature appeared to show that many researchers promote a mix of adults to deliver PE in primary schools. Petrie (2016b) has advocated for a model of collaborative research that has PL for university staff and teachers at its heart. The work of Williams and Macdonald (2015) found that the use of a range of adults (teachers, coaches, parents, volunteers either qualified or unqualified) to support the school's PE and co-curricular programmes can have educational value whereas, Blair and Capel (2013) supported the idea that adults other than teachers (AOTT) in the right context, with appropriate PL and support, can provide effective contributions to both PE programmes and co-curricular sports activities.

This section has highlighted different scenarios concerning who is delivering primary PE. It is clear that the environment of primary PE has altered in regards to who is delivering the PE lessons to our students. According to Jones and Green (2015) "the traditional pattern of PE being taught by a generalist classroom teacher may well become a thing of the past in primary schools in England" (p. 11). From the work of Aotearoa New Zealand researchers (for example for example Dyson et al., 2016; Penney et al., 2013; Petrie, 2010a; Petrie, Penney, et al., 2014; Powell, 2015) it is apparent that this could be the reality of the situation in our schools in the near future. The warning signs are there for all to see; the future may be sports coaches becoming the main deliverers of primary sport, rather than PE, with the

generalist teachers not being involved (Jones & Green, 2015). It is important that generalist teachers be involved in the delivery of primary PE; it is through programmes where collaboration takes place between the specialists with HPE curriculum expertise and the generalists that the potential for most impact on the quality of PE can occur.

### **Teacher knowledges and practices**

The most significant way to improve student learning is through improving the quality of teaching (Rink, 2013; Tsangaridou & Kyriakides, 2017). Consequently, developing teachers' subject knowledge will contribute to the quality of teaching of a subject area (You, 2011). Research has shown that primary teachers lack knowledge of PE subject matter in many cases (Kirk, 2005; Petrie, 2011; Rink & Hall, 2008). The following sections consider the importance of developing pedagogical content knowledge (PCK) and knowledge specifically for teaching primary PE.

#### The development of pedagogical content knowledge

PCK is one of the most important components of teaching (You, 2011). PCK was first described by Shulman (1986) as “the particular form of content knowledge that embodies the aspects of content most germane to its ‘teachability’” (p. 9). A year later Shulman (1987) added to his definition of PCK with, “that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding” (p. 8). PCK is the combination of subject-specific knowledge and how the teacher uses their professional knowledge and understanding to help students comprehend the subject matter. You (2011) also emphasised that “just as quality student learning is essential to our students, knowledge of quality teaching and teacher education practices is also absolutely necessary to our current and future teachers” (p. 109). Knowledge of this type assists teachers to understand that teaching is more than just the delivery of the content, but is also about choosing the most appropriate ways and techniques to impart this content. PCK is developed through teacher education programmes, the PL teachers participate in, from their teaching practice within schools and from interactions with other teachers.

Aligned with the view of PCK, Cochran-Smith and Lytle (1999) described three distinct conceptions of teacher learning; ‘knowledge-for-practice’, ‘knowledge-in-practice’ and ‘knowledge-of-practice’. Teachers require knowledge to teach, referred to as knowledge-for-practice; included are subject knowledge, effective practices, educational theories, and conceptual frameworks. Knowledge of this type is regarded as formal knowledge and theory. Knowledge-in-practice is explained as the practical knowledge or the essential knowledge. Expert or competent teachers know this, as it is embedded in their practice in the classroom and through their reflections on their practice. The third concept is referred to as knowledge-of-practice, according to Cochran-Smith and Lytle (1999), which is the knowledge teachers use to interpret and process the understandings and theories of others. Implementation is then made into the teachers’ own contexts taking consideration of the social, cultural, or political implications. It is evident that it is dependent on the stage of their career a teacher is at, and the type of projects they are involved in which determines which knowledge they require and use predominantly.

#### Physical Education pedagogical content knowledge

Physical Education pedagogical content knowledge (PE-PCK) can offer PE teachers a tool to help them construct specific knowledge, and assist them to make decisions regarding planning, implementing and reflecting which is required if they are to become effective teachers of PE (You, 2011). You (2011) through examination of the literature, discovered that there appeared to be little research around what constituted PE-PCK. From recognising research in other areas of general education, six components were acknowledged to represent PE-PCK:

- Knowledge of PE as a subject
- Knowledge of the PE curriculum
- Knowledge of teaching methods in PE
- Knowledge of students’ learning of physical activity
- Knowledge of PE assessment
- Knowledge of instructional environments in PE

The context in which PE is taught within the school is challenging for teachers (Patton, Parker, & Neutzling, 2012; Petrie & lisahunter, 2011) especially in primary

schools where PE is marginalised. Knowledge of context should be included as one of the components of PE-PCK. The context in which the teacher is working is essential. The individual context of each school is unique as the schools are comprised of students from diverse ethnicities, socio-economic backgrounds and each school has differing policies and priorities.

It is apparent that teachers need to develop a range of knowledge about the different aspects of teaching and their specialist subjects. From the research findings of Griffin, Dodds, and Rovegno (1996) and Tsangaridou (2006), it is suggested that teachers should develop their teaching expertise, especially their PCK, as there is a correlation between teachers' PCK and students' learning. Not all knowledge can be attained through teacher training and according to authors such as Armour and Yelling (2007), Day (2002) and Deglau and O'Sullivan (2006), teachers should be lifelong learners to continue developing their knowledge. PL will be discussed later in this chapter.

### Pedagogy and primary PE

Generalist classroom teachers in the main have a sound understanding of pedagogy and how to use these strategies within their classroom environment. Dyson et al. (2011) have referred to the fact that primary teachers are knowledgeable and comfortable in using student-centred pedagogies in other areas of the curriculum. Teachers are also convinced of the value these approaches provide for quality teaching and learning opportunities. However, the situation changes when asked to transfer this knowledge to PE, where teachers struggle with the concept of using student-centred approaches on the courts or the field. The research of Penney et al. (2013) concluded that "there was widespread concern that knowledge of content and pedagogy is deficient in PE in many school settings" (p. 19).

The majority of specialist PE teachers have the ability to choose from a range of PE pedagogical methods to organise the learning environment (for example, the gym, the field, the courts or the pool). Yet, according to Tinning (2010) when secondary PE lessons or coaching sessions are observed they predominantly follow the same sequence of demonstration, explanation and practice (DEP); this has been the

traditional pedagogical form and the most dominant within PE for many years. The DEP (Hoffman, 1971) pedagogical approach is consistent with what is often observed within primary schools and the teaching of PE (Petrie, 2008). This method of teaching is inconsistent with the student-centred approaches advocated for in the NZC and, therefore, there is a need to consider more student-centred approaches to delivering PE. *Teaching Games for Understanding* (TGfU) is a student-centred approach and formed a significant part of the PL programme central to this research. The rationale for using TGfU as opposed to another pedagogical model is outlined in the following Methodology chapter.

### *Teaching Games for Understanding*

The mid-1900s witnessed a growth in competitive sport which provided the momentum for games to be included in the PE curriculum in secondary schools (Oslin & Mitchell, 2006). Traditionally ‘good teaching’ was seen as using the technical or skill-based approach to teaching games where DEP was used to learn the skills (Hoffman, 1971), before the rules and the game were introduced. This DEP technical model according to Werner, Thorpe, and Bunker (1996) was primarily concerned with students improving skilfulness through the development and refining of the skills and techniques involved in the game. Advocates for this method believe that only after the skills have been mastered are the students in a position to transfer the skills into a modified game situation when the rules and regulations are gradually introduced (Werner et al., 1996). After reaching this stage, more rules and more players are introduced, so students begin to play a game that represents the official game.

Bunker and Thorpe (1982) argued that tactical knowledge from one game could be transferred to another just as skills such as passing, throwing and catching are transferred. As a result, TGfU has grouped games with similar intents, concepts, skills, offensive and defensive strategies and players’ roles (Butler, 2006). These classifications are termed-invasion, net/wall, striking/fielding and target games (Werner et al., 1996).

When using the TGfU model in lessons teachers are required to consider several conditions (Werner et al., 1996). The TGfU approach is framed around the use of

modified, small-sided games or mini-games that use a few simple rules (Bunker & Thorpe, 1982). The size and shape of the playing area are important (Werner et al., 1996); if small sided teams are being used, then the playing area may be quite small in relation. On the other hand, if a strategy incorporating the use of space is being developed, an oversized playing area may be required. The use of modified equipment (Werner et al., 1996) assists the students to throw, catch or strike the ball due to the equipment being appropriate for the age or size of the participants.

Students in this model acquire game appreciation and tactical awareness, and to support this development, teachers are required to pose questions that are challenging and engage the students in the processes of critical thinking and problem solving (Pearson & Webb, 2008). According to Light (2002), questioning promotes higher-order thinking and discussion about the tactics and strategies. Also, Pearson and Webb (2008) stated that “the use of questioning is a powerful method of encouraging players to analyse their actions, both individually, and as a team” (p. 2).

As previously noted, generalist primary school teachers lack PE-PCK which contributes to the lack of confidence when delivering PE, subsequently, a key challenge for primary teachers is to develop their questioning techniques, and the ability to develop activities that are appropriate to allow for the questions to be answered, both of which are central to the success of TGfU (Light, 2003). Mitchell, Oslin, and Griffin (2006) also reinforced that the quality of the questions is critical and should be an integral part of a teacher’s planning.

Teachers are required to have a deep knowledge and understanding of the game’s concepts and ideas (Pearson & Webb, 2008) in order to use effective questioning in the TGfU model; this could prove problematic to many primary teachers. Forrest, Webb, and Pearson (2006) claimed if teachers are not taught a process to allow for the use of quality questions, they will merely copy games from resources provided and imitate the questions. As questioning is a critical part of the TGfU approach, Pearson and Webb (2008) stated it is essential that teachers have a process that enables them to provide appropriate and challenging questions.

As student-centred learning and the use of inquiry learning as effective pedagogy is advocated for by the NZC, the pedagogical model of TGfU would provide primary teachers with a student-centred approach to contribute to the delivery of their PE programmes. As Pearson and Webb (2008) have evidenced, the use of effective questioning is a move away from the traditional teacher-centred model of teaching to a more student-centred approach as questioning provides opportunities for students to think for themselves.

Teachers must have a reflective approach to teaching in TGfU and, planning is essential to achieve the learning intentions of the lesson (Butler, 2006; Mitchell et al., 2006). They are required to understand the pedagogy of questioning, principally the use of open questions for the students to solve the task. Also, knowledge of the learner to ensure the correct groups are selected and classroom management skills are required for the small group work to be successful. The pedagogical model of TGfU could be seen simply as an organisational model for PE lessons if the teacher is not aware of the pedagogical strategies that are fundamental to teaching in this manner.

The time constraints in which the universities are working has meant the focus of initial teacher education (ITE) courses is mainly on curriculum and pedagogical approaches using the context of movement. Other areas such as specific content knowledge of the individual sports or activities have been reduced (Petrie, 2008). Thought is needed regarding these generalist teachers are entering the profession with very little knowledge that refers to content knowledge of PE (Dyson et al., 2011). The lack of experience in teaching PE and the ineffective initial teacher training can affect the generalist classroom teachers' ability to meet the demands of delivering PE lessons (Morgan & Bourke, 2005).

This section has detailed TGfU as a student-centred pedagogical model that could provide generalist teachers with a framework through which to deliver PE lessons rather than the commonly seen traditional teacher-led pedagogies. TGfU has been shown to align with the knowledge that generalist teachers are confident in using, for example student-centred and inquiry models in their classrooms. It is for these reasons that TGfU was chosen as the principal pedagogical model in the PL. It must

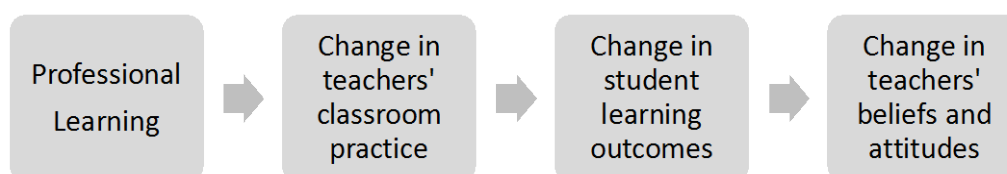
be acknowledged at this point that TGfU is just one of many student-centred pedagogies that could have formed the basis of the *PE Partnership Programme*.

### Teachers as learners

O'Sullivan and Deglau (2006) advocated that teachers should become 'active learners' by becoming involved in the PL programmes; to construct their own meanings and understandings, rather than merely being passive recipients of information.

### *Guskey's model of teacher change*

The process of teacher change was re-examined by Guskey (1985) as previously the first phase of teacher change was to change the beliefs and attitudes of teachers in regards to a new policy or initiative (Timperley & Alton-Lee, 2008). It was believed that if the new policy or initiative could be 'sold' to the teachers and they had confidence in it, they would then change their classroom practice and this, in turn, would change student outcomes and increase their learning. However, Guskey (1985) reordered the three phases associated with PL and developed a new model.



*Figure 3: New model of teacher change - Guskey 1985*

Guskey (1985) advocated that teachers have to first change their practice as a result of the learning acquired at the PL opportunity. Then, if changes occurred to student outcomes as a result of the transformed classroom practice, they were at that time, more likely to alter their attitudes and beliefs towards the initiative or policy. This was in contrast to the previous model, where it was thought that the beliefs of the teachers needed to be changed first. "Staff development programmes are systematic attempts to bring about change, change in the classroom practices of teachers, change in the learning outcomes of students and change in their beliefs and attitudes" (Guskey, 1986, p. 55). Guskey (2002) claimed "learning to be proficient

at something new and finding meaning in a new way of doing things requires both time and effort” (p. 386).

Changing classroom practice for many teachers is a significant step. Choosing to implement something new that they have not experienced or tried before is a significant risk; this could result in failure, a threat to a teachers’ professional pride or could jeopardise their professional standing within the school (Guskey, 1991). Bechtel and O’Sullivan (2006) confirmed through their research that teachers’ beliefs would change if they witnessed the success of a specific model on improving their students’ performance. If the new practice did not show improvement, they would stop using the model in their practice.

For students to achieve more valuable learning outcomes in PE, teachers are required to be professional learners. Applying the concept of teachers as learners to PE was illustrated by Armour and Yelling (2004). Darling-Hammond (1999) stated “teachers learn just as students do: by studying, doing, and reflecting: by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (p. 18). To achieve all of the aspects detailed by Darling-Hammond successfully, multiple opportunities are required by the teachers; just as teachers give students in their lessons to acquire the knowledge, teachers do not expect all students to learn something on the first attempt. Nonetheless, it is expected that teachers learn at their first attempt. Guskey and Yoon (2009) supported the need for time by articulating “effective professional development requires considerable time, and that time must be well organised, carefully structured, purposefully directed, and focused on content or pedagogy or both” (p. 499). For this to occur, PL has to be effective; it needs to contribute to both the teacher’s and students’ learning. PL enhances the teacher’s desire to improve their teaching in PE (You, 2011).

### **Professional learning**

The following section examines the international and national research concerning the concept of PL and explores features that are regarded as necessary to ensure PL is effective. The final subsection investigates the literature concerning PL specifically in PE.

The terms professional development (PD), continuing professional development (CPD), and professional learning (PL) used throughout the literature appear to be interchangeable. However, there does not seem to be a consensus in the usage of the terms. The term used appears to depend upon your location within the world. PL will be the term used in this project, as this is the term used within Aotearoa New Zealand, the location for this research.

### What is professional learning?

According to Day (2002) “teachers are at the ‘cutting edge of change’ and are ‘the single most important asset’ in the achievement of the vision of the learning society” (p. 431). Statements of this kind, in conjunction with the realisation by the policy-makers that schools are only as good as the teachers and staff who work within each institution confirm the significance of the role of PL for teachers. High-quality PL is required to be central to any endeavour made to ensure there are improvements in education systems (Guskey, 2002). Governments across the developed world now recognise that quality teaching improves student learning and, teachers improving their practice through PL improves the quality of their teaching (Rink, 2013).

The considerable amount of literature written on PL, teacher learning, and teacher change (for example, for example, Armour, 2006; Guskey, 1985; Guskey & Yoon, 2009; Petrie & McGee, 2012) has corroborated that improving the quality of teachers is an important factor for the improvement of student learning outcomes (Borko, 2004; Darling-Hammond, 2000; Fishman, Marx, Best, & Tal, 2003; Guskey, 1986). In addition, much research suggests that if teachers are to improve the quality of their teaching, then high-quality PL is needed for teachers (Armour & Yelling, 2004).

PL is defined in many ways. Craft (2000) described it as “all types of PL undertaken by teachers beyond the initial point of training” (p. 6). Teachers like those in any other professions need to deepen their knowledge frequently and develop their skills for the tasks at hand (Garet, Porter, Desimone, Birman, & Yoon, 2001). Quality teacher learning needs to be central to any education improvement proposal

(Guskey, 1986). Moreover, the programmes need to instigate change in classroom practice, attitudes and beliefs of teachers and the learning outcomes of students (Guskey, 2002). To enhance the process of change, teachers need to become lifelong learners (Armour & Yelling, 2007; Day, 2002; Deglau & O'Sullivan, 2006) or 'active learners' (Deglau & O'Sullivan, 2006; Petrie & McGee, 2012).

Teachers experience a wide range of activities that could be included in PL. Lieberman (1995) refers to direct teaching when attending a conference or workshop, or through learning in school including working with peers, critical friends or through collaboration on tasks. Learning undertaken outside of school in the form of networks, partnerships or subject associations is also a critical way in which teachers acquire knowledge (Lieberman, 1995). Day (1999) added a further context, regarding the response of students within the classroom. PL opportunities can be described as either formal or informal as suggested by Armour and Yelling (2007). Formal opportunities are those that are organised explicitly by a provider, either internal or external to the school. Informal opportunities are described as an informal discussion between colleagues or through the various social media avenues that are now available.

### Principles for effective PL

There is a requirement for PL to be effective if the quality of teachers and teaching is to improve. Increasing the quality of teaching will result in improved student outcomes (Borko, 2004; Fishman et al., 2003; Guskey, 1986). Kubitskey, Fishman, and Marx (2003) proposed that the purpose of teaching is to facilitate learning; PL is designed to improve teaching and therefore PL needs to be 'successful' PL to result in improved student learning. Comparably the Ministry of Education (2008) indicate that "if teaching is the greatest system influence on student outcomes, then it seems reasonable to assume that effective professional learning opportunities for teachers lead to improved student outcomes" (p. 14). Despite these claims, there appeared to be very little evidence to support this type of statement. It has been argued that PL does not impact on the improvement in student outcomes and teaching (Armour & Duncombe, 2004; Guskey, 2009; Guskey & Sparks, 1991).

Borko (2004) has described the PL that is available to teachers as “woefully inadequate” (p. 3). Many researchers (Armour, 2006; Armour & Yelling, 2007; Casey, 2013; Feiler, Heritage, & Gallimore, 2000; Garet et al., 2001) now recognise that the traditional one-day, off-site course delivered by the ‘expert’ is usually an ineffective method to support and enhance the PL of teachers. The one-off, one-day courses often do not allow teachers to return to school and implement what they have learned. Evidence has shown that the course may improve the knowledge of the teacher, but it does not necessarily allow for sustainable professional change (Hill, Hawk, & Taylor, 2001), due to time not being available to plan the implementation as they are straight back into teaching their lessons. Armour (2010) contended that “the ‘traditional’ approach sustains CPD providers and fills teachers’ CV’s, but it also helps ensure that, in practice very little changes and, importantly, that teachers remain passive and dependent” (p. 5).

Guskey (2003) asked the question “Do we know what makes professional development effective?” (p. 748). In addition to this question, he wanted to know whether researchers and practitioners had reached an agreement on what factors allow for PL to be effective and what criteria should be used to judge the effectiveness. Providing teachers with PL opportunities is a complex situation not only taking into consideration the characteristics that ensure it is effective, but also the method of delivery as discussed previously (Lieberman, 1995). The apparent lack of consensus shown in the literature about which characteristics are the most effective, or the most important, is due to different contexts, locations and bias or interpretations from the researchers. Despite the lack of consensus, there seem to be some commonalities between the researchers. Researchers (Darling-Hammond & McLaughlin, 1995; Garet et al., 2001; Guskey, 2003; Hill et al., 2001; Timperley, Wilson, Barrar, & Fung, 2007) have identified what they deem are essential characteristics or factors of PL programmes that if implemented will produce effective PL.

After consideration of the literature describing the characteristics and factors required for an effective PL programme for teachers. The ten principles identified in the *Teacher Professional Learning and Development Best Evidence Synthesis* (BES) produced by Timperley et al. (2007) was arguably a useful start point to

consider the PL provided in this research. The BES on PL was produced on behalf of the New Zealand MoE and synthesised 97 research studies on teacher PL that demonstrated a positive impact on valued student outcomes. The purpose was to provide a catalyst for improvement within Aotearoa New Zealand schools.

The ten principles as suggested by the BES are:

- Focus on valued student outcomes
- Worthwhile content
- Integration of knowledge and skills
- Assessment for professional inquiry
- Multiple opportunities to learn and apply information
- Approaches responsive to learning processes
- Opportunities to process new learning with others
- Knowledgeable expertise
- Active leadership
- Maintaining momentum

(Timperley, 2008)

In Aotearoa New Zealand Timperley (2008) has evidenced the 10 principles above as necessary for effective PL. However from my examination of the literature, it became apparent that five additional characteristics were relevant, that were not explicitly stated, but have linkage with the work of Timperley et al. (2007). The additional five principles are, building positive relationships, understanding the context, resourcing the teacher learning, the use of modelling and co-teaching and finally the utilisation of debriefing.

The need to build positive relationships between the facilitator and the participants of the PL was essential. In PL, teachers are required to work alongside the facilitator, and for this to be successful, trusting relationships need to be developed. Pellett and Pellett (2009) asserted that if positive relationships are not built between the facilitator and participants, the PL will not be effective and changes will not be seen in the practice of the teacher (Jones & Maloy, 1988; Patton, Parker, & Pratt, 2013). Becoming part of the school community through spending time in the

staffroom, talking to teachers at interval and lunchtime was recommended by Walsh (2002) to assist with the development of the relationships.

The requirement for the facilitator to comprehend the teachers' context both at a national and local level is crucial. The facilitator's ability to understand the context of the school assists in the building of the positive, trusting relationships with the participants. Understanding the school culture, the working conditions and what is deemed important by the school is fundamental as these will impact the PL and the facilitator as observed in the work of Patton et al. (2012); Petrie and Lisahunter (2011).

The provision of resources to teachers as part of PL programmes has appeared to have both positive and negative connotations for the teachers. Pre-packaged resources have been found to have positive effects on teachers through increasing their confidence (Petrie, 2012; Sallis et al., 1997). The process in which resources are introduced has to be carefully managed. Teachers are required to be acutely aware of the underlying concepts, the reasoning behind the use of the concepts and the sequencing of the lessons, if the resources are to be utilised as planned (Ball & Feiman-Nemser, 1988). Shulman (1987) claimed that resources are a method of increasing the primary teacher's knowledge base and, therefore, they need to be exposed to specific resources for this to be achieved. The SPARK-PE Model (McKenzie, Sallis, Kolody, & Faucette, 1997) is an example, of a situation where resources were implemented in a measured and cautious manner through training sessions to ensure the participants fully understood the material.

In contrast, many teachers have been found to rely on these resources for their planning and simply copied the lesson with no adaptation for the needs of their students (Apple & Jungck, 1990; Harris, Cale, & Musson, 2011a; Petrie, 2012). The process of replicating activities incorporated into resources has led to cases of teachers being de-professionalised and disempowered (Petrie, 2012), as their autonomy to make decisions concerning the curriculum delivered in their lessons and schools has been removed. Ball and Cohen (1996) encouraged the need to manipulate resources as the developers can only predict what knowledge the

students bring to the lesson; it is the teacher who has the in-depth knowledge of the learners to adapt the content to suit the students' needs.

Effective PL must include support provided through modelling and coaching and to be engaged in practical tasks that provide the opportunity to observe, assess and reflect on the new practices (Darling-Hammond & McLaughlin, 1995). These recommendations were made over twenty years ago, but as the literature including the BES has shown they are not commonly found in PL programmes delivered today.

Coulter and Woods (2012) used the modelling of lessons and co-teaching in their study that explored 28 primary school teachers' experience of a six-week PL programme. The modelling and co-teaching proved to be highly valuable to these participants as they were in a safe environment to observe, copy and try out and adapt activities (Coulter & Woods, 2012). To achieve a safe environment for teachers and facilitators, as previously stated, is necessary to develop trusting relationships and an adequate level of autonomy (Rytivaara & Kershner, 2012) to take full advantage of the strategy.

Debriefing provides an opportunity to reflect in a structured manner using the experiences to evaluate what has taken place and to plan new strategies as a result of that experience (Pearson & Smith, 1985). The origins of debriefing lie in the military, where campaigns and battles were debriefed by bringing the participants together to discuss what had occurred. Debriefing can be immediate or delayed; immediate occurred straight after the lesson and delayed debriefing take places approximately 24 hours afterwards. The research presents two viewpoints concerning debriefing with opposing opinions as to which is the most beneficial for participants. Brinko (1993) and Pearson and Smith (1985) promoted immediate debriefing as Brinko claimed it is the most useful when it is provided to the participant as soon as possible. Other authors had advocated for the delayed style of debriefing as this allowed the participant time to reflect on the lesson before the discussion began (Parker, 1991; Schon, 1983). Parker (1991) claimed if the teacher has had time to reflect on the lesson the debrief becomes a two-way process between the teacher and the observer. Despite the literature being undecided on

which type of debriefing is the most effective, what is clear is that the provision of feedback and feed-forward of teachers after an observation is crucial (Rink & Hall, 2008). The only agreement is that the period of the debrief should be equal to the length of the observation and that it should be structured.

### Leaders of professional learning

PL facilitators are often described as ‘knowledgeable experts’ (Timperley, 2008). Previous research (Chambers et al., 2012; Timperley, 2008; Weal & Coll, 2007) expressed that it is essential that the experts need to be knowledgeable in the relevant curriculum area and appropriate teaching practices to make a difference for the teachers.

In contrast, the notion of a ‘knowledgeable expert’ is contentious (Petrie, Burrows, et al., 2014). It is suggested by Petrie, Burrows, et al. (2014) from their experience, both in schools and from research, that frequently HPE ‘expertise’ is seen as the domain of the secondary school teachers or the tertiary lecturers with the primary teacher’s knowledge is often marginalised. Primary teachers can, however, be described as experts within their classroom as their expertise is in primary school teaching and knowledge of their students. As a result, both parties involved in PL can be described as experts. Fraser et al. (2007) stated that “capitalising on both sets of expertise means that ‘expert positions’ will be taken from time to time by each partner” (p.74), signifying that neither expertise should be regarded as having more value or legitimacy and everyone’s knowledge counts.

In the BES, Timperley (2008) claimed that experts providing PL need to know the content of the learning area and the teaching practices that make a difference for students. The facilitators are also required to make the new learning meaningful to the context the teachers are working in, by connecting the theory to their practice. Unfortunately, the BES has demonstrated that “not everyone engaged in promoting teacher PL has the knowledge and skills to do these things” (Timperley, 2008, p. 20).

This view is supported by Flintoff (2003), who advocated that specialist secondary PE teachers may not be in the best position to offer PE to primary school students or provide PL to primary teachers. It is also proposed that secondary PE teachers, although they have the specialist knowledge, may struggle to understand the requirements in a primary school setting. Similarly, the subject knowledge required at the primary level is considerably more diverse compared to that required at a secondary school. Despite the research suggesting that secondary PE teachers are possibly not ideal for delivering PL of this nature to primary teachers, this study will investigate the potential for secondary PE specialists to be effective facilitators.

### Professional learning in PE

Exploring the literature surrounding physical education professional learning (PE-PL) in primary schools was essential as this research focusses on the learning area of PE. Previous studies (for example for example Bechtel & O'Sullivan, 2006; Deglau & O'Sullivan, 2006; Jess et al., 2017; Jess & McEvelly, 2015; Makopoulou & Armour, 2011; Tsangaridou, 2016) have included investigating the impact of PL on PE teachers by examining how their attitudes, beliefs and teaching behaviours change due to the PL programmes that have been in place. Research literature concerning the PE-PL for primary school teachers is less common compared with that in secondary schools although in recent years there appears to be more research being undertaken (for example for example Brooks & DinanThompson, 2015; Carse, Jess, & Keay, 2017; Dyson et al., 2018; Freak & Miller, 2017; Petrie et al., 2013; Petrie & McGee, 2012; Tsangaridou, 2016).

The majority of studies which examined the type of PE teacher development available supported the use of collaborative learning (Wang & Ha, 2008). Collaborative learning methods allowed for teachers to improve their skills, have access to new ideas and allow for personal growth (Anderson, 1988; Armour & Yelling, 2007). Support for teacher development in this format appeared within the general education literature (Borko, 2004; Cochran-Smith & Lytle, 1990; Desimone, 2009) where learning communities were encouraged.

The impact of PE teacher development as found by Wang and Ha (2008) aligned with the general literature in that the benefits of PL included the improvement of skills, attitude and teacher reflection. In England, most of the PL undertaken by PE teachers was in the traditional form of a ‘course’, which occurred away from their school and lasted for one day. Any PL that lasted for longer than one day was usually undertaken during a weekend or over some weeks with the purpose of gaining qualifications in coaching specific sports (Armour & Yelling, 2004). The majority of PL opportunities focused on the sport-specific update type of courses. The second most popular type was curriculum development/planning/assessment one-day courses. These one-day PL opportunities do not allow for the formation of communities of learning or the generation of new ideas in an attempt to alter student learning and improve outcomes with follow-up sessions.

O'Sullivan and Deglau (2006) claimed that “PE-PL for both primary and secondary teachers needs to be situated in classroom practice; not abstract theorising about ideal environments and goals for PE teaching and teachers” (p. 446). Despite these challenges Armour and Yelling (2007) found that teachers valued the existing PL programmes, because of the networking opportunities that were available to them; but not necessarily the explicit learning that occurred while on the course. From an examination of a previous research project on PL in Aotearoa New Zealand the ‘Everybody Counts’ project (Petrie et al., 2013), it is clear that future research on PL in Aotearoa New Zealand must consider the factors of collaboration and be situated in schools as these are undoubtedly effective.

It is evident from the literature that an effective PL programme must consider the need for the learning to be situated in classroom practice and founded on the principle of collaborative learning between the individual primary teachers and the secondary specialist, as well as between the teachers in each of the schools.

### **Chapter summary**

As previously stated, providing ‘quality’ or ‘high-quality’ PE programmes is a worldwide issue; if we are to deliver high-quality PE lessons here in our Aotearoa New Zealand primary schools, the key issues currently inhibiting teachers from achieving this needs to be addressed.

The literature review has explored the conceptual perspectives informing debates and research, addressing elements around what shapes quality PE in primary schools and factors that are inhibiting this. The situation is extremely complex, as many matters need to be taken into consideration. Key factors have been identified; the first section of this review of literature examined the context of PE in Aotearoa New Zealand through how the learning area has been marginalised, leading on to the confusion around the use of terminology and consequently the issues of providing high-quality PE. The second section reviewed the concept of who is delivering PE in Aotearoa New Zealand primary schools and how this has changed in recent times. The third section presented ideas concerning teacher knowledges, and what knowledge is important for teachers of PE in primary schools. Also, the importance of teachers as learners and a theoretical model was used to explain teacher change and concepts for teaching and learning identified. The final section pertained to PL concerning what it is, and what is known about effective PL programmes within general education and PE. It has been argued that the traditional methods of one-off PL are ineffective, and suggestions made as to how PL can become effective and meaningful for teachers.

What is clear is that changes need to be made for the primary school students of Aotearoa New Zealand to receive quality PE lessons. To create such change requires consideration of new ways of working at a teacher level, some at the school level, and some at a policy level. Using this knowledge and questions raised, the research examined whether a specialist PE teacher working alongside generalist primary teachers for a prolonged period is a viable and effective approach to improving the quality of PE being taught in many primary schools.

## Chapter Three: Methodology

### Introduction

The following chapter outlines the research paradigm, the methodology and methods of the study employed to investigate the following research question:

*How can a specialist secondary PE teacher best support teachers in primary schools to enhance the quality of teaching and learning in PE in Aotearoa New Zealand?*

The following sub-questions were investigated:

- What learning opportunities best enhance the primary teacher's ability to teach PE?
- What are the needs of teachers as learners?
- What is the role of the specialist PE teacher in supporting primary teachers?

### Research paradigms

This study is situated within both the interpretive and constructivist research paradigms. The following section will outline the stance taken when researching the questions above.

#### Interpretivist

A paradigm according to Guba and Lincoln (1989) is a belief system referring to the way the world is viewed. Burrell and Morgan (1979) explained that an:

*Interpretive paradigm is informed by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. It seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of action (p. 28).*

An interpretive paradigm was adopted for the research project as this approach aims to allow researchers to appreciate how people construct and understand the realities of their lived experiences (Atkinson, 2012; Pope, 2006).

From an interpretative perspective, the purpose of the research is to advance knowledge by describing and interpreting the phenomena of the world in an attempt to share meaning with others (Bassey, 1999). An interpretivist researcher analyses human social actions in an attempt to understand the meanings that represent the action (Schwandt, 2003). The interpretive paradigm provided an appropriate framework for data collection that I required to engage with the teachers' lived experiences, feelings, and interactions during the professional learning (PL) programme and my role in the programme. The research project drew on the teachers' experiences of a PL opportunity they had undertaken.

### Constructivist

While this research is positioned closely with the interpretivist paradigm, the constructivist theory encompasses many of the assumptions and beliefs within this study. Constructivism is an epistemological view of knowledge acquisition emphasising knowledge construction rather than knowledge transmission (Applefield, Huber, & Moallem, 2000). Sherman and Clocksin (2002) stated: "constructivists believe that connecting previous experiences and knowledge to new concepts enhances learning" (p. 6). This paradigm additionally provides a range of ways to think about learning and development, and subsequently about teaching (Kroll, 2004).

Learning in a constructivist environment allows teachers to experience problems and situations that are relevant to them. It allows the researcher to focus on the big-picture ideas rather than the basic skills of the topic. Knowledge is constructed through how the information is presented and how participants are supported in the construction of that knowledge. According to Meece (2002), one of the critical points in Vygotsky's socio-cultural theory is that "social interactions are critical; knowledge is co-constructed between two or more people", (cited in cited in Schunk, 2002 p. 244 p. 244).

Social constructivism highlights the need for supportive mentoring to enable the learner to achieve more complex skills, understanding and eventually independence. The two case study schools and the teachers who are at the centre of

this research are seen as existing within society, and this society is situated in time and impacted on by culture and history. Therefore, knowledge and meaning are constructed through the social system and the interactions conducted within the system and between the people in it. Guba and Lincoln (1985) support this idea by stating that “events or situations are theoretically open to many constructions as there are persons engaged in them, or as many reconstructions by a single individual as imagination allows” (p. 77).

#### *Social constructivist key concepts*

This section identifies four social constructivist concepts that were seen to be pertinent in the early stages of the PL programme central to the research project. Both the first, situated learning, and second, communities of practice, were developed by Lave and Wenger (1991), while the third, scaffolding, was initially defined by Wood, Bruner, and Ross (1976) from the work of Vygotsky. The fourth concept of feedback is derived from the assessment for learning (AfL) theory and is often termed formative assessment, from the work of Michael Scriven in the 1960's.

Situated learning (Lave & Wenger, 1991) is a model of learning that developed out of the constructivist learning theory and is a concept advocated for in social constructivist approaches. Lave & Wenger (1991) argue that “learning should not be viewed as simply the transmission of abstract and decontextualised knowledge from one individual to another, but a social process whereby knowledge is co-constructed.” They suggest that such learning is situated in a specific context and embedded within a particular social and physical environment. Situated learning theory provides a means for us to investigate the relationships among the many physical, social and cultural features of the learning situation (Lave and Wenger 1991). Therefore, situated learning theories encourage us to widen our thoughts and see teachers not as individual learners but as teachers who construct their knowledge through social settings.

Dyson, Griffin and Hastie (2004) stated that situated learning provides an authentic framework in which to position teaching and learning in Physical Education (PE). The idea is further recognised by O'Sullivan and Deglau (2006) who claimed, PE

professional learning (PE-PL) should be situated in classroom practice-not abstract theorising. Elements of situated learning particular to this research included providing teachers access to expert performances and modelling of lessons by the facilitator. The activities used within the PL programme were authentic as they were situated in the context of the New Zealand Curriculum (NZC).

A key concept of Lave and Wenger's (1991) situated learning theory is the idea of legitimate peripheral participation in communities of practice (CoP). CoP are groups of people that work and contribute together to ensure a shared and common goal is achieved (Wenger, 2006). Legitimate peripheral participation means that the participation in the CoP is authentic and genuine, meaning that the learners' involvement in an activity has to be meaningful to them as an individual. As the group learns together, they build relationships and develop a sense of belonging and mutual commitment to improving the practice that is occurring (Wenger, 2006). Participants in a CoP must be active and engage in knowledge sharing and knowledge creation in order to improve practice.

In a CoP, the members are diverse and include mentors through to novices. Lave and Wenger (1991) describe how the novices become the masters or mentors, through legitimate peripheral participation. It is through tasks that the novices become acquainted with the practices, the vocabulary and the tasks of the CoP. In time, these newcomers begin to become the masters or the experts and their participation become more pivotal to the functioning of this community.

The concept of CoP is relevant to this research as the primary school teachers can be regarded as the 'novices' in the group and the secondary specialist PE teacher as the 'mentor'. CoP focused PL encourages the learning to move away from the expert imparting their knowledge to the novices, to the situation where the teacher becomes the co-constructor of knowledge giving the teacher greater personal responsibility for their professional growth, learning and development. However, as highlighted later in the discussion chapter, the desire to use CoP unfortunately did not materialise due to the challenges concerning the availability of time for the teachers.

The constructivist concept of scaffolding was used within the PL programme to support the teachers in their learning; it is seen as an intervention and is a useful umbrella term to describe a wide range of adult actions (Daniels, 2007). Scaffolding is in the form of assistance by an adult that enables the learner to solve a problem, carry out a task or achieve a goal which was previously beyond the learner (Wood et al., 1976). When scaffolding is employed, it involves simplifying the learner's role rather than the task (Daniels, 2007) therefore, the learning process is tailored to the needs of the learner. When facilitating the PL programme, the learning for the teachers was scaffolded through the modelling of PE lessons by the facilitator, progressing to co-teaching then finally the teacher taking responsibility for the lesson with the support of the facilitator.

AfL theory (often referred to as formative assessment) is strongly associated with the social constructivist theories of learning. Black and Wiliam (1998) argued that if teachers use formative assessments as part of their teaching, students could learn at approximately double the rate. Hattie's research has shown that using formative assessment in the classroom brings about real-world differences in learner achievement as it assists in making understanding and knowledge 'more visible' (Hattie, 2012). AfL helps learners understand what excellence looks like and how they can develop their work to reach that level.

Feedback is a component of AfL and is considered by many educationalists (such as Black & Wiliam, 1998; Hattie, 2012; Sadler, 1989; Tunstall & Gipps, 1996) a vital component of effective teaching practice and is crucial if learning is to be successful (Sadler, 1989; Tunstall & Gipps, 1996). The information specified by the teacher used to bridge the gap between the student's existing knowledge and where they need to get to in order to achieve the set task is described as feedback (Sadler, 1989). Feedback has a positive effect on learner achievement. Teachers were provided feedback throughout the PL programme activities of modelling, co-teaching and meetings.

## **Research design**

### A qualitative approach

Qualitative research is grounded in a philosophical position, which is broadly ‘interpretivist’, in the sense that it is concerned with how the social world is interpreted, understood, experienced, produced or constructed (Mason, 2002). The study concerned the evaluation of the participants’ (the teachers’) experiences of being part of the PL programme. The collected data was derived from interactions with teachers, which was of a qualitative nature not quantitative. Through qualitative research, researchers can explore the wide variety of facets of the social world, Strauss and Corbin (1998) described qualitative research as:

*Any type of research that produces findings not arrived by statistical procedures or other means of quantification. It can refer to research about persons’ lives, lived experiences, behaviours, emotions and feelings as well as about organisational functioning, social movements, cultural phenomena and interactions between nations (p. 10-11).*

A qualitative approach was the most suitable method for this study, as it was evaluative and reflective after my involvement in facilitating the PL for three years. Hastie and Hay (2012) support this notion by explaining that qualitative researchers when conducting research tend to spend an extensive amount of time within the setting they are studying, and they rely on themselves as the principal means for collecting the data. In addition to this, researchers conduct ongoing analysis of the data, rather than waiting until all the information has been gathered to start the analysis. Expressive language, the researcher’s voice, and that of the participants are used within the write-up.

### *Case study*

The case study methodology was utilised as it offered me the opportunity to gain rich data and the ability to understand what happened or did not happen in specific schools and explore the reasons why (Newby, 2010). A case study has been described as the examination of a phenomenon in a real-life context, and it is, therefore, the phenomenon that becomes the case (Yin, 1984, 1994). In this study, the phenomenon (the case) was how a specialist secondary PE teacher best supported the primary teachers to deliver PE lessons.

From the literature, it was apparent that providing a definition or describing a case study was a difficult undertaking, as different authors have different explanations of the term. According to Merriam (1988) and Yin (1994), a case study can be defined as a method, a methodology or a research design. For the purpose of this study, I adopted the stance that case study was a methodology within which various methods were positioned to obtain the necessary data. The study of such cases allows for an in-depth understanding of the complexities, the importance and uniqueness of the project, policy or programme in a real-life context (Simons, 2009; Stake, 1995; Sturman, 1994).

Case studies have additionally been categorised by authors such as Bassey (1999), Cohen, Manion, and Morrison (2007), Stake (2000, 2005) and Merriam (1988). They identified key features for many different types of case studies such as descriptive, explanatory, exploratory, story-telling and theory-testing. Using the categories identified, the two case studies central to this research reflect elements of three different types of case studies. Firstly, features of an evaluative case study (Bassey, 1999) were identified as necessary, as this type of case study examined the extent to which a programme has achieved the stated objectives (Bassey, 1999). The second type of case study reflected in this study was interpretive (Merriam, 1988) where conceptual categories were developed to examine the initial assumptions of the study. When designing the research, each of these types of case study was considered to ensure appropriate data collection methods were employed.

The two case studies were conducted in parallel to each other; the two schools selected and the teachers participated in the *PE Partnership Programme*. These schools were identified initially due to being feeder primary schools to the college where I was employed. It appeared logical that these schools should be approached, as students from these schools transitioned to the college when they reached year 9 of their schooling.

The purpose of the research was to evaluate the PL to identify the successes, weaknesses and limitations of the programme, by explaining and interpreting the data gathered from the participants who had been involved. It intended to provide explanations and interpretations for what possible causes produced the effects and

how these effects changed teachers' practice and attitudes within the schools. Additionally, it was retrospective, as it looked back throughout the *PE Partnership Programme*.

### Outline of the PE Partnership Programme

#### *Rationale and intent of the PE Partnership Programme*

The motivation for developing the programme was to provide the primary teachers with a structured and supportive PE-PL programme. The programme aimed to enhance the pedagogical skills and PE content knowledge (PE-CK) and increase the confidence of the non-specialist generalist teachers, through the modelling of lessons, co-teaching opportunities and resources. It should be noted at this point the PL programme was designed using my prior knowledge and experience and not subject to any theoretical background. Implications of this are discussed later in the Discussion chapter.

#### *Identifying the schools to be involved*

Six primary schools that were direct feeder schools to the college where I was employed were identified as possibilities. After an initial letter was sent to the Principals outlining the project, face-to-face meetings were organised to discuss the programme further. The responses from the schools were positive: four of the six were extremely keen to be involved, and after further discussion, three schools decided to participate in the PL programme.

Towards the end of Term Four 2010, day visits were organised to each of the three schools to observe and to get a sense and awareness for each of the school's contexts; this time spent in the schools proved to be extremely worthwhile. I started to develop an understanding and appreciation of the pressures primary school teachers were under to deliver all eight learning areas of the *New Zealand Curriculum* (Ministry of Education, 2007a).

#### *Planning the programme*

The intent was for the PL programme to be personalised for each school. However, the schools determined I was best placed to design the PL as they considered me to

be the 'knowledgeable expert' which resulted in similarities across the three schools. The PL programme was planned to ensure it would be easy to understand and undemanding regarding the time commitment needed from the teachers. For the programme to be shared across all the teachers, I felt there needed to be a common resource available from which the teachers worked.

In PE, many pedagogical models could be employed to deliver lessons such as *Teaching Games for Understanding* (TGfU) (Bunker & Thorpe, 1982), *Sport Education* (SE) (Siedentop, 2002), *Personal and Social Responsibility* (Hellison, 2011), *Spectrum of Teaching Styles in PE* (Mosston, 1966) and *Physical Literacy Concept* (Whitehead, 2001). The rationale for adopting a TGfU approach for the programme was that this model aligned with the teachers' current student-centred pedagogies, and the generalist teachers were accustomed to having their students working in small groups. The games involved in the PL were modified, meaning very few rules to be learnt by both the teachers and the students. Not knowing all the rules for the games/sports had been a significant concern for these teachers and impacted on their confidence. In addition, the modified games and simple rules meant the students could self-manage and referee the games themselves, allowing for more than one game to be played at a time; and ensuring that all the students were participating and involved in the activities.

Acknowledgement is made that using only a games based model was somewhat limiting and does not reflect the whole breadth of the NZC Health and Physical Education (HPE) curriculum. The PL programme intended to develop the teachers' confidence and abilities in delivering PE lessons. TGfU provided a start point as not all the facets of PE could be introduced at once to the generalist teachers.

#### *Preparation of resources*

Resource cards were prepared for the participants to use throughout the programme. For these cards, I adapted information from the Games Sense cards (Australian Sports Commission, 1999) and the TopLink (Youth Sport Trust, 2001) resources; both of which I had previously used in the UK and Aotearoa New Zealand in my teaching. Adaptations and simplification were needed to reduce the amount of content and to make them user-friendly for the primary teachers. The cards

contained the information needed to be able to deliver the modified game; the equipment that was needed, a diagram showing how to set up the equipment, and a list of the rules needed to play the game. On the reverse side were focus questions to assist the teachers to question the students on their understandings of the game and the strategies being learnt. Appendix A shows an example of a resource card from the invasion games.

*The delivery of the PE Partnership Programme*

In the initial staff meetings, I was aware of the time pressures that primary teachers are under, and to try and ensure their complete ‘buy-in’ to the programme, I could not take up too much of their time, so information was prioritised to keep the meetings as short as possible.

Each school decided which teachers would be involved in the PL programme in the first year and the format was different for the two schools. At Beach School, the Principal decided that as many staff as possible should be involved by rotating the staff around every three or four weeks. The Principal at Ocean School however decided the five staff of the year 3 and 4 syndicate would be involved as one of the teachers was the teacher in charge of sport and had been a part of the preliminary meetings. I was involved with each of the five teachers for one lesson a week for the whole year with a few exceptions when lessons were cancelled due to other school commitments or occasionally inclement weather.

*Table 2: Participants and focus for each term of the three year PL programme*

		Participants	Term 1	Term 2	Term 3	Term 4
Year 1	Beach School	Mix	S & F	Invasion	Invasion	Athletics
	Ocean School	Year 3 & 4	Swimming S & F	Invasion	Invasion	Net/Wall
Year 2	Beach School	Year 3 & 4	Striking & Fielding	Swimming Invasion	Invasion	Striking & Fielding
	Ocean School	Year 5 & 6	Striking & Fielding	Invasion	Invasion	Net/Wall
Year 3	Beach School	Year 5 & 6	Striking & Fielding	Invasion	Swimming Net/Wall	Striking & Fielding Athletics
	Ocean School	Year 7 & 8	Striking & Fielding	Invasion	Invasion	Net/Wall

The focus for each term throughout the *PE Partnership Programme* is detailed on the table above. The delivery format for the PL was a scaffolded approach where I modelled the first two or three lessons with the classroom teacher assisting. Then the lessons would move to a more co-teaching approach, where the teacher took more responsibility in the lesson and carried out more of the organisational and teaching tasks. Towards the end of the unit the responsibility then switched meaning the teacher was responsible for the delivery of the lesson, and I was there to assist and provide guidance and feedback to the teacher.

At the end of the first year, I had concerns regarding the amount of progress the staff at Beach School had made in comparison to the teachers at Ocean School. I expressed my concerns to the Principal, explaining that in my opinion, this was the result of the staff participating in an average of five sessions, compared with the teachers from Ocean School, who had participated in 20 lessons. A decision was made that the following year I would concentrate my efforts on the year 3 and 4 syndicate.

The programme continued as planned in year 2 and 3 except at Beach School a slight modification was made; as a consequence of not having a swimming pool on the site, they were included in a scheme called Pools iN SchoolZ (PoolsiNSchoolZ, 2018). This scheme involved a large portable swimming pool being brought to the school site for a term; these pools were heated and covered by a large marquee type structure. More information is available in Appendix B. As a result, the Principal insisted that all classes use the pool for two lessons each week, during these swimming lessons I assisted the teachers.

### **School profiles and participants**

The following section provides a profile for each of the two case study schools and the participants involved in the research project. Data from field notes, Educational Review Office (ERO) reports and the Ministry of Education (MoE) website were used to create a profile and describe the characteristics of each school. Both schools are situated in South Auckland, and both are decile 1 schools. The context of South Auckland, Aotearoa New Zealand and an explanation of the decile rating system were provided previously in Chapter One.

## Beach School

Beach School was a contributing primary school with students in years 1 to 6, with a roll at the time of the research of 464 of which 246 were male, and 218 were female students. The ethnic composition of the school roll was 17% of students identifying as Māori, 81% as Pacific Island, and 2% as other ethnicities. At the time of the data collection, there were 23 classes at Beach School. The breakdown for each syndicate<sup>12</sup> was six reception classes, seven year 1 and 2 (junior school) classes, five year 3 and 4 (middle school) classes, and five year 5 and 6 (senior school) classes. Each class had a full-time teacher; in addition to these teachers, there was the senior leadership team (SLT) that consisted of the Principal and two Deputy Principals. The two Deputy Principals were not classroom teachers; assisting the teachers were six teacher aides who were spread across the school supporting specific students.

At Beach School, two teachers shared the responsibility of being the teacher in charge of sport. Sport was given reasonably high priority at the school; however, the school often struggled to enter teams into the inter-school competitions due to lack of students. Rugby and football teams were regularly entered and supported by one of the male teachers at the school. Success in tournaments was varied for Beach School as they were not one of the high achieving sports schools in the area, however, on the few occasions they were successful this was recognised in school assemblies and newsletters.

One of the Deputy Principals had the responsibility to oversee the implementation of the PE curriculum but, this was again not seen as a high priority due to the numerous other responsibilities she held. Teachers planning folders were checked to see if PE was planned for during the week, although they were not held accountable if that lesson was not delivered. The PE curriculum tended to follow the format of athletics, small ball skills and large ball skills. Swimming was added into the programme when the swimming pool arrived from the Pools in SchoolZ initiative to ensure this was used by all the students.

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<sup>12</sup> The term syndicate refers to the different age groups in primary schools, for example years 1 and 2, years 3 and 4, years 5 and 6 and finally year 7 and 8.

The facilities (accommodation and resources) at the school available for PE lessons were limited. The field could only be used during the dry periods of the year; it could not be used all year round as it was prone to be waterlogged in numerous places as a result of heavy rain. The field was of significant size, approximately two rugby pitches. In addition, to the field was a concrete playground, which was quite limiting for PE lessons. It was long and thin which meant the students were always spread out when this area was being used. The school had an indoor hall area, which was of a reasonable size. Beach School was quite well resourced in regards to PE equipment (such as balls, bats and cones) due to the schools *KiwiSport* direct funding being used to bolster the gear shed.

Beach School had received very good ERO reports from the MoE in both 2010 and 2015. The culture of the school was very inclusive of the diverse, mainly Pacific backgrounds, languages and experiences the students and the community brought to the school. The teachers were receptive to new ideas to develop further their teaching and learning practices. The 2015 report made a specific reference to HPE; “the school has made good progress in embedding literacy initiatives and in developing learning areas such as science, and health and physical education”. A comment was also made that “teachers continue to receive professional development that promotes school-wide consistency in the quality of teaching”. This ethos within the school could support why the teachers readily accepted the PE-PL programme as part of their school PL.

### Ocean School

Ocean School was a full primary school with students in years 1 to 8, and at the time of the research, there were 432 students (202 males, and 230 females) on the roll. The school roll consisted of students from diverse ethnicities; 23% of students identified as Māori, 69% as Pacific Island, and 8% as other ethnicities.

At the time of the research, there were 22 classes at Ocean School. The classes consisted of three reception classes, four junior school year 1 and 2 classes, and five, year 3 and 4 classes in the middle school. Additionally, there were five senior school classes of year 5 and 6 students, and five, year 7 and 8 classes in the

intermediate school. Each class had a full-time teacher. In addition to the class teachers there was a SLT that consisted of the Principal, the Deputy Principal, and two Assistant Principals, none of whom were in the classroom full-time. Assisting the teachers were five ancillary staff, which included teacher aides and the librarian. The teacher aides were assigned to specific students across the school who required assistance for either physical or learning difficulties.

Sport at Ocean School had a high profile generated primarily by the SLT and in turn was held in very high regard by the students, particularly those in years 7 and 8. The school ensured representative teams competed in all the inter-school competitions held throughout the year in all the age categories. In many instances, the teams were very successful, and this was then recognised in school assemblies and newsletters. This success brought acclaim to the school and was used as part of the marketing campaigns when attracting new students. In order to facilitate the sport within the school, a teacher from the year 3 and 4 syndicate held overall responsibility for being the teacher in charge of sport with the assistance of two teachers from the other two syndicates.

In contrast to sport, PE was not regarded as a high priority learning area. PE was encouraged by the SLT and was reported on through school reports; however, teachers were not made accountable if it was not taught. The focus for the PE programme tended to follow the inter-school programme and if lessons were delivered they supported the selection of the teams that were to represent the school in the upcoming competition. Documentation for PE was limited and organised around the activities, swimming (the school had an outdoor pool), large ball and small ball activities and athletics. No teacher had the designated responsibility for being in charge of PE within the school. Besides, PE and sport, fitness was advocated for each morning by the SLT. Students' participation in this physical activity was sporadic and tended to occur when the weather was nice, and then all the syndicate could go outside on to the playground to take part in Jump Jam<sup>13</sup>. Teachers would organise a television, play one section of the DVD for

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<sup>13</sup> Jump Jam is an aerobic programme specifically designed for primary and intermediate students and teachers. It is created to develop fundamental movement skills, increase fitness and motivate students to move and enjoy exercise. The resources provide teachers with a DVD containing all the music and choreography which is simple to use.

approximately 10 to 15 minutes and stand around the sides or at the back of the students supervising with very little involvement or encouragement. Numerous students did not actively participate in this activity for a variety of reasons; they could not see the screen, they could not hear the music, or they were not motivated to take part. Participation declined as the students progressed through the school, as many of the intermediate aged students struggled to see the value of Jump Jam.

The facilities for PE included a field that was available for the majority of the year, again prone to waterlogging during extended periods of rain. The field was approximately the size of three rugby pitches. There were two areas of concrete playgrounds, one of which was severely limited in size in the final year of the programme due to building work being carried out at the school. The other playground had a basketball court marked out. The school had an indoor hall area, which was of a reasonable size; however, it was limiting for PE lessons as no balls were allowed to be used in the hall due to the number of spotlights and speakers on the walls and ceiling. Additionally, the school had an outdoor swimming pool on site which was used extensively during the summer months (Term One-late January to mid-March). The school made very good use of the direct funding received through *KiwiSport* to increase the amount of equipment and ensure there was more variety available to the teachers and that it was age specific.

Ocean School received good ERO reports from the MoE in 2015, and previously in 2010. The culture of the school was very positive with a very strong sense of belonging from both the students and the teachers. A high level of trust and expectations were evident to help the students achieve success. Highlighted in the 2015 report as effective were the schools' literacy and numeracy strategies, their use of data to monitor progress and the authentic learning opportunities that were provided to students. There was a strong PL ethos within the school where the teachers were provided with multiple opportunities to refine and improve their teaching and learning practices. The 2010 ERO report commented that:

*Teachers continue to have good opportunities to refine and improve their practices for teaching and learning. They benefit from professional learning and development programmes that increase their curriculum knowledge and extend their repertoire of teaching strategies.*

Ocean School promoted a “teachers’ as learners” culture; the PE-PL programme contributed to the opportunities provided for the teachers and was warmly welcomed.

### Participants

Generalist teachers who had participated in the *PE Partnership Programme* were invited to take part in the research project. Nine teachers, the Principal and one Deputy Principal from each of the case study schools agreed to become the research participants. The two tables below show the teachers that were involved in the research along with how many sessions they took part in throughout the three year PL programme. These 18 teachers were observed teaching four PE lessons and participated in either the individual, group or both types of interviews.

*Table 3: Beach School - Number of sessions teachers participated in*

Teacher	Year 1	Year 2	Year 3	Total
Tara	14	26		40
Linda	4	26		30
Margaret	3	21		24
Donna	4	25		29
Mary	4		28	32
Joanne			27	27
Becky	4		27	31
Millie			27	27
Sarah	4		27	31

*Table 4: Ocean School - Number of sessions teachers participated in*

Teacher	Year 1	Year 2	Year 3	Total
Rachel	15		8	23
Rosie			14	14
Diane		14	10	24
Sheila		28	8	36
Laura		19	8	27
Debbie			2	2
Helen			34	34
Ashley	14	13	30	57
Judy			27	27

The teaching experience of the participants ranged from a newly qualified teacher through to several teachers have taught for more than 15 years. The teachers also

represented a range across the spectrum of syndicates (years 3 & 4, years 5 & 6 and years 7 & 8) within each school. Only one of the participants described herself as confident teaching PE, and that was due to her undertaking a Sport and Recreation degree prior to gaining her teaching qualification. Additional information is provided about the participants in the Findings chapter.

### **Data collection**

Various data sources were drawn upon to explore how I could best support the primary teachers to enhance the quality of PE lessons delivered in the selected primary schools. Data was gathered during and post the PL programme from the following sources:

- Field notes and diary entries (pre and during)
- Documentary sources (pre and post)
- Semi-structured individual interviews (post)
- Semi-structured group interviews (post)
- Lesson observations (post)

The tables below detail the timeline for the data collection in each school in relation to the PL initiative being conducted.

*Table 5: Timeline for data collection at Beach School*

Phase	Year	Beach School
Pre	2010 (Term Four)	Initial Meetings – Field Notes and Documentary Sources
During	2011 2012 2013	Mix of Syndicates – Field Notes and Diary Entries Year 3 and 4 – Field Notes and Diary Entries Year 5 and 6 – Field Notes and Diary Entries
Post	2014 (Term One)	Lesson observations, Individual Interviews, Group Interviews and Documentary Sources

*Table 6: Timeline for data collection at Ocean School*

Phase	Year	Ocean School
Pre	2010 (Term Four)	Initial Meetings – Field Notes and Documentary Sources
During	2011 2012 2013	Year 3 and 4 – Field Notes and Diary Entries Year 5 and 6 – Field Notes and Diary Entries Year 7 and 8 – Field Notes and Diary Entries
Post	2014 (Term One)	Lesson observations, Individual Interviews, Group Interviews and Documentary Sources

### Field notes and diary entries

It has been recognised (Denzin & Lincoln, 2000; Pole & Morrison, 2003) that field notes and journals are a method of including oneself in the qualitative research. In my study, I completed field notes and diary entries consistently throughout the three years of the *PE Partnership Programme*. After every lesson, meeting, syndicate meeting or informal conversation in the staff room, I spent time developing observational notes as part of my primary record (Pole & Morrison, 2003). Sometimes it was difficult to take notes while I was involved in the lessons as I was either leading the lesson or co-teaching with the primary school teacher. Consequently, I carried my notebook and diary with me at all times, so when I had a spare few minutes, I would write notes to expand on later. Also, I would make voice recordings on my phone if I found I did not have time to write my thoughts and reflections down. These voice recordings were then transcribed that evening. At this point, I was unsure of the direction the research would follow, therefore I documented everything from the lesson. The notes consisted of descriptions of the happenings and reflections on incidents that could potentially be relevant to my research. The entries were reminiscent of a story of the lesson, recalling who did what, whether things were successful or not and details of conversations that could prove valuable in the future.

### Documentary sources

The documentary data collected via the internet provided background information relating to the school population, decile, student achievement, and co-curricular activities and ERO reports. Additional information was sourced directly from the schools on PE programming, planning, the organisation of curricular activities, for example, long-term and short-term planning documents, lesson plans for PE and resources used by teachers for curricular activities. Examination of pre and post intervention documents took place to establish any variations that had occurred as a result of the intervention.

### Interviews

The interviews were conducted over a six-week period during Term One (2014) and planned through appointments that accommodated the work schedule of the

teachers and avoided clashes with existing school and syndicate meetings. The majority of the interviews took place after school except for those with the Principal and Deputy Principal. The location for the interviews was either a classroom or a personal office, somewhere that the teacher felt comfortable. The interviews were organised with a break between each where possible; this was to allow me time to listen and reflect on the responses provided. Additionally, in the beginning, it provided time to rethink or reword questions to ensure more coherent responses. All the interviews were audio recorded, transcribed verbatim and presented to each of the participants for verification before any of the data was used in the thesis.

Due to the number of teachers involved in the PL programme and to ensure the data collected through the interviews were manageable the Principal, a Deputy Principal, and two teachers from each syndicate from both schools were invited to participate in semi-structured individual interviews. Members of SLT were interviewed to understand their opinion regarding the PL programme in order to determine whether they considered this type of programme valuable for the PL of their teachers as ultimately the SLT of a school make the decisions on what PL the teachers will receive throughout the year. Each syndicate also participated in a group interview which involved the use of questions concerning the programme more generally rather than specifically for the individuals.

*Table 7: Number of interviews conducted*

Beach School	Ocean School
Group interviews Year 3 & 4 Syndicate (5 teachers) Year 5 & 6 Syndicate (5 teachers)	Group interviews Year 3 & 4 Syndicate (5 teachers) Year 5 & 6 Syndicate (5 teachers) Year 7 & 8 Syndicate (5 teachers)
Individual teacher interviews From year 3 & 4 Syndicate (2 teachers) From year 5 & 6 Syndicate (2 teachers)	Individual teacher interviews From year 3 & 4 Syndicate (2 teachers) From year 5 & 6 Syndicate (2 teachers) From year 7 & 8 Syndicate (2 teachers)
Principal interview	Principal interview
Deputy Principal interview	Deputy Principal interview
Total Number of Interviews	Total Number of Interviews
Group Interviews x 2 Individual Interviews x 6	Group Interviews x 3 Individual Interviews x 8

The table above details the number of interviews that took place in each of the schools. The group interviews were organised using the syndicate structure within each of the schools.

#### *Semi-structured individual interviews*

Interviews are a powerful method of data collection (Denzin & Lincoln, 2005) and are special forms of conversations. They enable both the interviewer and the interviewee to discuss their interpretations of the research and express how they see the situation from their point of view (Cohen et al., 2007). The primary purpose of the one on one semi-structured interview was to gain in-depth information from the participants regarding their beliefs, views, and understandings. Awareness was required from me during the interviews to ensure these intentions were achieved to gain the insights needed. Mindfulness was needed if the interviews started to deviate, to determine whether the conversation was meaningful and useful and should be allowed to continue or whether the discussion needed to be brought back to the focus. Questions focused upon attitudes towards PE, previous PL undertaken in PE and views surrounding the *PE Partnership Programme*. Appendices C and D provide further details regarding the protocols for the Principals, Deputy Principals and individual teacher interviews and some of the questions that were included. The interviews also contributed to the trustworthiness of the data collected as they were recorded and transcribed.

#### *Semi-structured group interviews*

To complement the one on one interviews additional group interviews were undertaken with teachers from each of the syndicate groups in each of the schools. Group interviews were used as opposed to focus groups. Focus groups tend to be used in exploratory research where little is known about the case or phenomenon (Stewart & Shamdasani, 2015). As I was the designer and facilitator of the PL programme group interviews were more appropriate as I knew about the case. Additionally, in a group interview, the researcher can take the lead role, assume control of the discussion, and ask the questions. Group interviews allow the discussion to develop and varied opinions to be expressed; however, an individual may be discouraged to contribute if they hold a differing opinion to the rest of the group (Morgan, 1997). As the interviewer, I was required to ensure that all

participants contributed to the discussion and all opinions were heard. In contrast, in a focus group the researcher is the facilitator or the moderator of the discussions between the participants using focus materials such as cards, photographs, etcetera to stimulate discussion (Thomas, 2011).

Group interviews with the syndicates intended to gain more data around the delivery of the PL programme and, if the programme was to be delivered in the future, what changes they would like to see. Appendix E outlines the protocols and some of the questions used during the group interviews.

### Lesson observations

Nine teachers in each school were observed teaching their PE lessons on four occasions. The method of observations was one strand of the data collection process and provided the opportunity to combine a variety of methods to collect data that was naturally occurring within a social situation (Cohen et al., 2007; Newby, 2010). Within the lessons, I undertook the role of a participant observer, as the teachers and students already knew me. As a participant observer using the protocols for the observations (Appendix F), I watched what happened, listened to what teachers said, and occasionally I asked for clarification (Gillham, 2000). The purpose of the observations was to identify whether the PE lessons being delivered by the teachers following the PL had improved in quality. Data was recorded using the following categories.

#### General information of the lesson

- date, time and length of the lesson
- class, year group and teacher
- gender split of the class
- activity

#### Aspects of what I have modelled/taught

- were students grouped effectively
- suitable warm-up activities
- small-sided games
- questioning for learning and understanding

### Student Engagement

- responding during questioning by the teacher
- actively participating
- demonstrating key competencies

### Teacher Involvement

- movement between the groups
- demonstrating skills and activities
- questioning / talking to students while taking part in activities
- coaching within the games
- giving praise and correcting when necessary

### Researcher reflections comments

- space to write reflections or general comments on the lesson

It was important during these lesson observations that I limited my participation because my previous role in the *PE Partnership Programme* was to lead the lessons. If the role of participant observer was not carefully managed, there was the potential to skew the data collected.

While observing, I wore a microphone and made a voice recording throughout the lesson; the voice recording included comments and thoughts from what I was observing and additionally a description of the activities that were taking place throughout the lesson. After the conclusion of the lesson, at the earliest opportunity detailed observation notes/data were completed to ensure an accurate picture was drawn from the information gathered. A template (Appendix G) was used to ensure consistency was maintained between the large numbers of observations being completed. The analysis of the data was primarily interpretive, meaning the observations were subjective in nature. The tables below detail how many lesson observations were undertaken in each of the schools.

*Table 8: Beach School - Number of lesson observations conducted*

Teacher	Planned	Actual
Tara	4	4
Linda	4	4
Margaret	4	4
Donna	4	4
Mary	4	4
Joanne	4	4
Becky	4	4
Millie	4	4
Sarah	4	4

*Table 9: Ocean School - Number of lesson observations conducted*

Teacher	Planned	Actual
Rachel	4	3
Rosie	4	2
Diane	4	4
Sheila	4	4
Laura	4	3
Debbie	4	4
Helen	4	4
Ashley	4	3
Judy	4	4

### **Data analysis**

Creswell (1998) stated, “qualitative research is complex, involving fieldwork for prolonged periods of time, collecting words and pictures, analysing this information inductively while focusing on participants’ views, and writing about the process using expressive and persuasive language” (p. 24). It was vital for me to have a logical system to work through to ensure I achieved the best analysis of the gathered information as a large amount of data is confusing and chaotic (Hastie & Glotova, 2012). A series of ‘steps to consider’ provided by Hastie and Glotova (2012) for engaging in the challenging and complex process of analysing qualitative data afforded me this logical process. It was these steps that I implemented in the data analysis phase of my research project:

- Getting your data into a usable form;
- Beginning the sorting process;
- Deciding on the type of analysis;

- Developing initial categories or structures;
- Checking category validity; and
- Writing - or constructing - themes, case, or narratives.

(Hastie & Glotova, 2012, p. 311311).

### Getting the data into a usable form

As a researcher, I needed to manage, handle and code the vast, wide-ranging amounts of the data collected from the multiple sources. The analysis process commenced as soon as the first data had been collected. During the PL programme I recorded diary entries for each lesson and meeting I was involved in. The primary purpose of this was to fulfil the requirements for the *KiwiSport* reporting. However, these notes were made more detailed and complete once I was aware that the *PE Partnership Programme* was to form the research for this thesis.

All the individual and group interviews were transcribed verbatim from the recordings. While observing the lessons, I created voice memos, detailing what was occurring during the lesson, along with thoughts, questions, reflections or comments that were raised. The voice memos were then transferred on to the lesson observation templates an example can be seen in Appendix G. All the lesson observation templates, and interview transcripts were scanned and converted into a portable document format (PDF) and uploaded into my computer files.

### Sorting process, type of analysis and developing categories

Despite Hastie and Glotova (2012) separating these three steps, I found myself combining them as I worked through the process of sorting. The process began by highlighting quotes and comments that seemed important or significant, and that may be of value later in the analysis process. At the same time, I wrote words down that might develop into codes for example 'pedagogy', 'quality PE' and 'background', from being reflexive and noting similarities and differences between the participants and the observations.

From the initial sorting phase, I decided on some pre-determined categories and codes and began to assign specific quotes and examples within the interview

transcripts and the lesson observations. The table below provides four examples of the categories and codes used, while Appendix H provides all the codes used.

*Table 10: Examples of some of the codes used in the data analysis*

<p style="text-align: center;"><b>Pedagogy</b></p> <ul style="list-style-type: none"> <li>• TGfU</li> <li>• Questioning</li> <li>• Inclusion</li> <li>• Equity</li> <li>• Relationships</li> <li>• Inter personal skills</li> <li>• Content knowledge</li> <li>• Safety issues</li> <li>• Progression</li> </ul>	<p style="text-align: center;"><b>Quality PE</b></p> <ul style="list-style-type: none"> <li>• Nature / purpose</li> <li>• Content</li> <li>• Pedagogy</li> <li>• Resources</li> <li>• Key competencies</li> <li>• Evaluation of lesson</li> <li>• Happy, Busy, Good</li> <li>• Teacher interaction (not instructional)</li> <li>• Value of PE</li> <li>• Meaning of PE</li> </ul>
<p style="text-align: center;"><b>Student Outcomes</b></p> <ul style="list-style-type: none"> <li>• Engagement</li> <li>• Enjoyment</li> <li>• Participation</li> <li>• Improvement in performance</li> <li>• Evidence of learning</li> </ul>	<p style="text-align: center;"><b>Background</b></p> <ul style="list-style-type: none"> <li>• Attitude to PE before</li> <li>• Teaching experience</li> <li>• Specialist subject</li> <li>• Barriers to PE</li> <li>• Frustrations</li> <li>• Confidence before</li> <li>• Confidence after</li> <li>• PE PD</li> </ul>

To both manage this process and then to analyse the data collected, I used the data management analysis tool called ATLAS.ti. software programme. The data was organised initially into folders for each school and subfolders for each syndicate. Employing the ATLAS.ti software allowed me to read through each piece of data and use codes (keywords) such as those identified above to highlight relevant sections, quotes or comments. Using these codes, I was then able to start connecting words, sentences and paragraphs from the each of the transcripts and observations to discover themes emerging from the data. Reading and re-reading the data allowed me to link themes and similar ideas across the syndicates in a school and also across the schools. The key themes that emerged provided a structure that shaped the findings and discussion chapters of this study.

Not all the data corresponded neatly to the themes. One of the participants (Rachel) I considered to be an outlier from the data collected from her. This teacher's approach and response to the PL programme was contradictory. The data collected through conversations, field notes and the group interview contradicted to what was observed in her lessons.

### Validity

In research, reliability is a critical concern (Hastie & Hay, 2012). Comparing qualitative data drawn from different sources (field notes, documentary sources, lesson observations and interviews) ensured validity through the process of triangulation. In addition, the transcripts of both the individual and group interviews when completed were given back to the participants to check that what I had written was an accurate record of the interview, which confirms credibility. According to Lincoln and Guba (1985), this member checking is "the most crucial technique for establishing credibility" (p.314). Validity through trustworthiness is discussed further in the next section.

### Writing-constructing-themes, cases or narratives

From the analysis, many themes and sub-themes emerged. For each of these, I had to consistently check with the research questions as to whether this theme was relevant to the research. Maintaining relevance throughout this process was essential. Some themes appeared more critical than others and some data overlapped from one theme to another. Careful consideration was needed when writing to ensure repetition did not occur; as a result, there were many rewritings of the Findings chapter to achieve a cohesive structure.

### **Trustworthiness of research**

As a teacher, it was essential for me to ensure that this research would be useful to the PE teaching profession. For this to happen, the research had to be trustworthy and credible. On the issue of trustworthiness, the study referred to four criteria identified by Lincoln and Guba (1985) for trustworthiness-credibility, transferability, dependability and confirmability.

The first criterion of credibility was addressed by ensuring an accurate picture was represented of the phenomenon through the prolonged engagement, in-depth observations, and triangulation of the data. As the findings were established from the rigorous examination of the data, this ensured the findings were precise and not generalised. To ensure the second criterion of transferability, enough contextual information had to be included in the case studies and data collection methods to enable a researcher in the future to be able to transfer the methodological approach. The dependability criterion was achieved by ensuring the methods could be identified, justified, and explained. Finally, the fourth criterion of confirmability was met by verifying that the data supported the findings, interpretations, and recommendations.

Triangulation is a powerful way of demonstrating trustworthiness. Triangulation can be defined as the use of two or more methods of data collection (Cohen, Manion, & Morrison, 2011). The criteria for trustworthiness and credibility were met through the triangulation of my data from the document analysis, the individual and group interviews, the lesson observations and the field notes/diary entries. A range of checks was employed within the research, which allowed for the results and conclusions to be judged by others to be credible and of use within the PE teaching profession.

### **Reflexivity**

In qualitative research, the researcher interprets and brings meaning to what they are studying and as a result, reflexivity and qualitative research harmonise together. For this research, the definition of reflexivity was provided by Schwandt (2001) as, “(a) the process of critical self-reflection on one’s biases, theoretical predispositions, (b) an acknowledgement of the inquirer’s place in the setting, context, social phenomenon he or she seeks to understand and (c) a means for critical examination of the entire research process” (p.224). As this research was located within the interpretivist and constructivist paradigm, I had to engage in a reflexive process throughout the research. For my research, positional reflexivity (Macbeth, 2001) was the most appropriate as it positioned me in regards to my opinions and understandings surrounding my research topic. Being reflexive in the research required honesty and ethical maturity in the research practice (Shacklock

& Smyth, 1998). Part of this process was to recognise the limitations of my research and to disclose my beliefs and values around the research question. Acknowledgement is also needed regarding my changing role within the schools.

*Being the 'insider' and the 'outsider'*

My role changed throughout the *PE Partnership Programme*. I traded the role of secondary PE teacher, PL programme designer, to the facilitator, to the researcher. At times I was considered to be an insider and at times an outsider in the qualitative research. An insider is a researcher who possesses intimate knowledge of the organisation and its members (Merton, 1972). Labaree (2002) suggested that a qualitative researcher can simultaneously be an insider and an outsider to some extent. Additionally, Mercer (2007) claimed that researchers' identities as insiders and outsiders could alter depending on their personalities and when and where the research is conducted. It can also be described as being on a continuum, with fluidity (Rabe, 2003). The situation of holding both positions concurs with the situation I found myself in throughout the study. In the initial stages in the role of facilitator solely I was an insider, as my knowledge around PL increased through the scholarly reading and the writing of this thesis I developed into the outsider. I began to recognise issues more clearly that were arising from the insider and outsider perspective.

As an insider there were three advantages, having a superior understanding of the group, the ability to interact with the group and relational intimacy with the participants (Bonner & Tolhurst, 2002). These insider advantages equally generated challenges in the research as the relationships between myself and the participants became complex, due to the length of time I spent with the participants some of the relationships developed into friendships. Greater familiarity can lead to the loss of objectivity and researchers making assumptions based on previous knowledge and experience (DeLyser, 2001). A researcher who is positioned as the insider may find it difficult to separate their personal experiences from those of the participants (Kanuha, 2000). Familiarity could also complicate the process of interviewing, as participants assume the researcher already knows the answer (DeLyser, 2001).

As the designer and the facilitator of the PL, bias could have been created through my beliefs and value systems which might have impacted the research. This awareness was required to ensure that participants did not provide answers that they thought I wanted to hear but, they explained responses thoroughly, not thinking I knew the answers already due to my time in the schools. Reflexivity ensures a critical awareness of potential bias that could affect the research process.

Caution is required to balance personal perspectives while maintaining positive relationships. Acquiring this balance proved difficult, but possible, through the ongoing and active process of critical reflection on what knowledge has been produced and how the knowledge comes into existence (Guillemin & Gillam, 2004).

### *Policy Borrowing*

As a secondary PE specialist and a novice PL provider who wanted to assist the teachers of my feeder primary schools, I drew on my previous work as a Director of Sport in the Sports Colleges programme in the UK. The *PE Partnership Programme* was derived from my knowledge of implementing a similar project in England. I used the information and evidence gained previously to design a programme I thought could be transferred from the other side of the world to two primary schools in Aotearoa New Zealand and be equally as effective. I was not aware of the pitfalls of policy borrowing.

The term policy borrowing refers to the use of programmes or guidelines in a different country, for example, education as compared to health policy or public policy as compared to a commercial setting to where it originated. There appears to be some evidence that policy writers and PL providers often assume that best practices can be transferred from one country to another (Chakroun, 2010). Copying programmes directly have proven to be challenging (Steiner-Khamsi, 2016) due to the differences in the countries cultural and contextual conditions (Harris, Jones, & Adams, 2016; Phillips & Ochs, 2003). Due to the differences in culture and context, it is argued that policies and programme should be treated with caution and if possible the ideas trialled before fully implementing in the new setting (Reid, 2011).

The differing cultural conditions and contexts were not taken into account; aspects of the programme that I knew had been successful in England were not so successful in Aotearoa New Zealand and required adjustments to be effective. Policy borrowing is inextricably linked to the contextual factors found in schools (Harris et al., 2016). As a result, any secondary PE teacher or anyone else who is considering working with primary school teachers through a PL programme must reflect upon this caution. Reflexivity must be applied to policies from other countries and due consideration of the context be applied.

### **Ethical considerations**

The University of Waikato Ethics Committee approved the research in December 2013 (EDU098/13). A copy of the letter is available in the Appendices (Appendix I). An overview of my ethics protocol for the evaluation of the *PE Partnership Programme* is explained as follows. For me to collect data to investigate whether this PL had been successful, I recruited teachers with whom I had worked with for the past three years.

The following key points needed to be taken into consideration and adhered to when the data was collected and subsequently written up:

- Informed consent was gained from the participants through an information letter that was provided before commencing the research activities.
- The least amount of disruption as possible was intended when collecting the data; class-teaching time was not interrupted in any way for the observations of PE lessons, as these took place during the timetabled PE session.
- The teacher interviews both individual and group lasted approximately 1 hour and took place at a convenient time for the participants during release time or after school hours.
- The participants involved could withdraw from the study at any time and could withdraw their data up until they verified their transcripts. If a participant chose to withdraw, they would notify the intention to the researcher.

- Those involved were kept informed about the work and the results through emails.
- After the lesson observations and interviews participants read through and amended the transcripts that had been made and then verified it was an accurate record of what happened.
- The confidentiality of the participants and the schools was assured through the use of pseudonyms when the data was written up to be included in the final thesis and other publications/presentations arising from the research.
- Confidentiality was respected at all times; however, I could not guarantee anonymity to the Principals, Deputy Principals and teachers as their identity could be revealed through association with me.

There was no conflict of interest, as at no point was I assessing students' work or be in a position of authority over the primary school teachers. The research had no potential to harm teachers' employment opportunities for promotion or be used as part of the school's appraisal processes. Had any disputes arisen, I would have been the first point of contact and then my supervisors. Also, I did not foresee any extra cultural or social considerations needed to be made as I worked within a Māori and Pasifika low decile school and had done so for the past eight years so was sensitive to these contexts. However, I would have sought advice had any unexpected social or cultural issues arisen.

### **Chapter summary**

The purpose of this chapter was to outline the paradigm, the methodology and the methods used to collect the data to answer the research question. The study implemented an interpretive approach as this allowed the researcher to examine the social world in which this study was positioned. Data was collected through the mixed methods approach which included the use of documentary sources, individual interviews, group interviews, lesson observations and field notes. Attention was paid to ensure the data was gathered in a valid and trustworthy manner and abiding by the ethical considerations stated.



## **Chapter Four: Findings**

This chapter presents the main findings of the research collected through 67 lesson observations of 18 teachers, nine individual interviews, four group interviews and field notes. From the data analysis, it has become apparent that the data can be categorised into four sections. These are first, concerning the teachers' background stories, secondly, the professional learning (PL) programme, thirdly, how teachers have changed through participating in the PL and lastly, the changes to pedagogical knowledge.

### **The teachers' background stories**

In the first section of the Findings chapter, the backgrounds of the teachers are described, to include the initial teacher education (ITE) and the in-service PL undertaken regarding Physical Education (PE). The subjects that teachers perceive to be their area of expertise are highlighted. The focus then turns to the reported frustrations and barriers faced when providing PE lessons and details the teachers' attitude to PE and confidence in delivering the subject.

#### Initial teacher education

From the information provided by the teachers in the nine individual interviews, six undertook their initial teacher education (ITE) training at various tertiary institutions in Aotearoa New Zealand, while three gained their qualifications overseas—two in South Africa and one in a Pacific Island nation. The make-up of the teaching qualifications varied depending on the institutions and whether they were gained through universities, teachers' colleges, or a combination of both. Despite the qualification processes being very different, eight of the teachers agreed that their training was inadequate and insufficient to be able to teach PE in primary schools. The exception to this was one teacher who completed a Sport and Recreation degree and then a general education qualification to enable her to teach in primary schools.

The limited amount of time in their training that was devoted to PE was referred to by the teachers as a contributing factor to the perceived inadequacy to teach PE. As

Ashley (Ocean School) noted: “it was only one semester and, it was like one session a week, it wasn’t sufficient because it was so limited” (Individual Interview). Diane (Ocean School) agreed stating, “when I went to Uni there was just one semester and you were supposed to learn everything in that one semester!” (Individual Interview). For two teachers the content taught was regarded as inappropriate due to the focus being on the early years of primary schooling (both teachers have only taught year 7 and 8). Judy’s (Ocean School) comments are illustrative of the inappropriateness felt:

*Some of the games we did were, you know it was good but it wasn’t what I needed coming into this, I mean a lot of it was throwing bean bags around and walking on lines, activities for the younger end of primary school, things that I have never used (Individual Interview).*

*I think I had to apply a lot of logic and my own common sense to it; I don’t think it was adequate. We did a big unit on swimming, ... that’s great, but a lot of the time we don’t teach swimming in school, it is outsourced (Individual Interview).*

A further criticism of the teacher training reported by the interviewees was the focus on ‘playing’ the sports rather than how to teach the activities. Becky (Beach School) stated, “I can remember playing the sports, but I can’t remember being shown how to teach the sports” (Individual Interview). It was clear that many of the teachers understood PE to be the playing of the sports and little else; this was substantiated through the comments provided by the teachers.

Furthermore, several of the participants said they could not remember what they participated in, regarding PE and lectures in preparation for teaching the subject once in employment. Rosie (Ocean School) commented, “I can’t remember what we did, it was a long time ago, but then if it was significant and worthwhile what we did, I think I would have remembered at least some of it!” (Individual Interview).

### In-service professional learning

In the same way participants were critical of the preparation in their pre-service training to deliver PE they were also critical about the limited in-service training they had received. Three of the participants (one with five to ten years and two with

one to five years' experience) claimed they had received no PL in PE during their teaching careers before being involved in this programme. Three of the more experienced teachers from Beach School commented on a 'PE contract' they were involved in at the school some years previously. Mary (Beach School) explained that the 'contract' involved, an 'expert' visiting the school for a number of staff meetings and talking through some lessons and ideas, but she reported that there was no modelling of lessons or observations of PE teaching (Individual Interview). After further discussion (Field Notes-Term One 2011) with the teachers, it became clear that the 'contract' was, in fact, the *Physical Activity Initiative (PAI)*<sup>14</sup>.

Three teachers referred to coaches from local clubs that had visited the school and delivered sessions to their classes. Mary (Beach School) noted, "the only thing I can remember is we had people who were experts who came out from the rugby league, soccer and netball clubs and they took each class for 45 minutes" (Individual Interview). They recalled that the focus of these sessions was sports specific and concerned about how to teach the relevant skills for that sport.

Due to the lack of formal PL opportunities available, teachers in both schools instigated informal sessions. Two teachers referred to being involved in some informal PL that one of the teachers in charge of sport provided. The PL consisted of "a couple of sessions that were organised after school for those teachers interested" (Rosie, Ocean School, Individual Interview). Again they reported these sessions tended to be sports specific and focussed on skill development through drills. The teachers said they were shown how to organise the drills to develop the associated skills.

### Perceived area of expertise

Of the nine teachers interviewed individually, eight considered their specialist subject to be either literacy or numeracy. It was apparent that the teachers had formulated these opinions due to the amount of time they and the school had

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<sup>14</sup> The PAI was introduced in 2005 through the Ministries of Education and Health working collaboratively with Sport and Recreation New Zealand (Sport NZ, formerly SPARC). The broad aim was to provide PL for primary schools to build teacher and school capacity for students to develop knowledge, skills and attitudes which will motivate them to participate in regular physical activity Ministry of Education. (2005). *The physical activity initiative: Sharpening the focus 1-4*. Wellington, New Zealand: Ministry of Education.

invested into PL for each of these two subject areas, or as a result of personal interest. Laura's (Ocean School) comment corroborated this "I think personally a strength of mine is the maths, but then all the PL's around literacy and numeracy and that has just made me more interested" (Individual Interview).

Despite Linda (Beach School) undertaking a specialist PE degree she now considered literacy and numeracy more of a specialist area. One teacher, Diane (Ocean School) felt she could not commit to an answer as she had only been teaching for two years and thought it was too early in her career to have an opinion although she remarked she had received more PL in literacy and numeracy than any other learning area.

#### Confidence before professional learning programme

During both the individual and group interviews, there was a focus on the teachers' levels of confidence to deliver PE before participating in the PL programme. Teachers reported that their attitude towards PE was affected due to their limited level of confidence to teach the subject. The 18 generalist teachers expressed varying levels of confidence. No one claimed they were fully confident in delivering PE, including the teacher who had previously undertaken the Sport and Recreation degree at university. The reasons given for the lack of confidence included not having a personal interest in PE, lack of knowledge surrounding the subject, and not understanding the sports, and so, therefore, not knowing how to teach them. The lack of confidence was highlighted in comments by Skye (Ocean School) who said, "I found it was scary, I had moved up to the senior school, [years 5 and 6] and I didn't know the skills for rugby, etc. I didn't know how I was going to teach it" (Group Interview). Laura (Ocean School) added:

*I wasn't confident with it, and I didn't have any skills or knowledge on it. I used to cringe a lot, it felt like a burden, like this whole other thing that I had to do, it didn't come automatically to me. So I really had to think about it, and it was really challenging to set up a programme and to involve everybody and to make it engaging as well, that's what I found, I found it really hard (Individual Interview).*

### Attitude towards PE before professional learning programme

The participants' attitudes toward PE appeared to coincide not only with the lack of confidence but also with the pressure placed on them to complete the requirements necessary for literacy and numeracy. All the teachers remarked that the time allocated to PE would be used for other subjects, especially if they felt that the literacy and numeracy programmes had been compromised in some way during the day. One of the most significant concerns from the teachers appeared to be the issue of time constraints and the pressures inflicted on them to complete everything, specifically with the literacy and numeracy programmes now being seen as high-stakes subjects. The teachers made comments such as:

*I did plan to do this for PE today, but I will flag it today because we didn't finish our reading programme as we had the Duffy Theatre in. You know I would never have done that with reading and say I am going to leave reading and let's go and do PE (Mary, Beach School, Individual Interview).*

Reasons given for not teaching PE included outside groups such as theatre groups disrupting the normal timetable of the day or using inclement weather as an excuse to postpone the PE lesson. It appeared only the slightest excuse was necessary for some teachers not to teach PE. "Sometimes I felt a sense of relief if it was raining, or for some other reason, I couldn't teach PE" (Skye, Ocean School, Group Interview). Becky (Beach School) concurred with this thinking by mentioning, "if there were going to be a corner to be cut it would be PE because you know you get overwhelmed with the pressure of having to finish the reading and things like that" (Individual Interview).

The emphasis on literacy and numeracy and lack of time in the school day provided some teachers with a convenient reason to avoid teaching PE. Tara from Beach School referred to the prominence on literacy and numeracy programmes and the need in lower decile schools to concentrate on these subjects:

*Because I have worked in South Auckland pretty much for most of my teaching career, I think I have become so concerned with teaching children the core subjects that it became my ultimate focus, to get them literate and to get them numerate. I think everything else sort of took a side role, especially because I have done things like reading recovery and with all our PL, there was so much to take on (Individual Interview).*

Three teachers described their own negative personal experiences of PE as students as an additional reason that contributed to their current attitudes. Laura (Ocean School) commented, “I was not particularly good at sport at school and, therefore, ridiculed as a result from my peers”. Diane (Ocean School) also added about, “... having to participate in activities that I did not enjoy such as gymnastics and cross country”. As a result of these experiences, the teachers reported that it was sometimes difficult to be positive towards the subject.

Despite the less than favourable attitude towards PE shown by the teachers, six of the nine interviewed remarked that they regarded PE as an important subject. Rosie (Ocean School) stated, “I think PE is really, really important but unfortunately it is one of the first things we drop. If we run out of time, PE is thrown out of the window, which I don’t agree with” (Group Interview). Becky noted, “it’s important that the children get outside and run around, burn off some energy” (Becky, Beach School, Individual Interview).

#### Frustrations associated with teaching PE

A further issue raised was the amount of time required for planning and devising a suitable PE programme for the students. “If I had to make the whole thing [the programme of study] by myself and have to think about what we need to do ... well, I can’t do that, I am too busy, I have got to organise my reading and writing, and that’s really important” (Becky, Beach School, Individual Interview).

The senior leadership teams (SLT) of the schools although recognising the need for a broad-ranging curriculum, acknowledged the frustrations experienced by the teachers of their schools. Lindsey (Ocean School), a member of one of the SLT, remarked, “because it is just another thing to fit in with the timetable and it’s just how it has become, it is always one of those last things planned for” (Individual Interview). Holly (Beach School) accepted that teachers were feeling the pressure of the high-stakes subjects; “everyone gets so bogged down with the academic subjects that things get lost, you know the paperwork is so huge that things like PE unfortunately sometimes slip away” (Individual Interview).

Lindsey (Ocean School) additionally commented about one of her frustrations, was where teachers sometimes used the withdrawal of PE as a form of punishment, by threatening to take the PE lesson away from the students for incomplete work or if the poor behaviour did not improve. “The thing that annoys me is when the teachers use it as a punishment (pause) ‘if you don’t finish your writing, we are not going to do PE’” (Individual Interview). The discussion chapter further examines this issue of whether this is a form of punishment for the students or whether it is an avoidance strategy used by teachers who are not confident in delivering this subject.

### **The professional learning programme**

This section examines the data collected regarding the PL programme. The findings have been divided into three subsections (i) the processes used to deliver the content of the PL programme, (ii) the nature of the programme, and (iii) the important features of PL.

#### The content delivery process

This section explores the data gathered from the individual interviews, group interviews, and the field notes, concerning how the content was delivered during the PL programme. The learning provided for the teachers was delivered through a scaffolded learning approach where initially the responsibility for the lesson rested with the facilitator and the teachers observed the facilitator modelling three or four lessons. As a unit of work progressed, the responsibility became shared through a co-teaching approach and then towards the end, the teacher took on all the responsibility for the lesson. Throughout the process, the facilitator assisted the teachers by providing feedback and feed-forward during the lessons.

#### *Modelling of lessons*

The initial support in lessons provided to teachers included the modelling of PE lessons from myself (the facilitator). The modelling demonstrated how to organise and deliver the activities/games shown on the resource cards. Each term the teachers observed the lessons being modelled. This method of delivery was appreciated and viewed as extremely beneficial by all the teachers involved. Indicative comments included “I liked it, I thought the modelling was really helpful, but maybe I learn

better that way” (Judy, Ocean School) and Mary from Beach School noted, “you modelled for us, and that was very important for me”. Becky (Beach School) shared these sentiments and explained why she felt the modelling enhanced her learning:

*I thought it was really good, really good and I actually liked seeing a whole term because ... you could see the progression you went through, how you built up this one game, and you used it for all the skills or things you were going to teach. I saw how that got built on, whereas, if you were just doing one there, and one there you wouldn't get to see that (Individual Interview).*

Several teachers made reference to the fact that they were visual learners and, therefore, observing the lesson and referring to the resources at the same time improved the quality of their learning:

*I am quite a visual learner, so when I saw you doing it, that was so much better than just being told how to do it, it's better to see it and to get that confidence and then teach the lesson (Mary, Beach School, Group Interview).*

Also, teachers expressed gratitude for being able to observe the modifications to activities when the students were struggling to perform the skills or did not grasp the concept of the game. Judy provided a good example for this situation:

*To see how you changed it, from what was written on the card ... especially the things that weren't working was really good because that is where I don't know how to in PE, I find it the hardest when something is not working (Ocean School, Group Interview).*

Despite the extensive amount of positive commentary concerning the modelling of lessons, the data from the lesson observations provided evidence that many of the teachers were replicating what they had witnessed from my teaching. The following chapter will consider how teachers were required to use the modelling of lessons to then adapt the activity in response to the needs of their students.

### *Co-teaching*

On the completion of the modelling of lessons phase, co-teaching of lessons by the teacher and myself took place. In this phase, we took equal responsibility in delivering the lesson. The teachers noted that they found this experience valuable as they felt part of the lesson, but secure in the knowledge that I was still available to assist if necessary:

*You modelled, and we watched, then you drew us in, so we had to be involved, we had to take a team, and you took a team, but you still observed me to see if I was doing it ok and it was still safe (Mary, Beach School, Individual Interview).*

Laura (Ocean School) shared this viewpoint by noting, “it was well organised, I liked how you started off with you teaching, we observed and then we co-taught, then we taught, and you helped us along the way” (Group Interview).

The format for the co-teaching varied from teacher to teacher. A few of the teachers felt confident to deliver the lesson with me as the facilitator contributing at the appropriate times to enhance the game or assist with the questioning of the students (Field Notes-Term Two 2011). Others were keen to share the delivery equally throughout the lessons; however, in these cases, I gradually withdrew my contribution to the teaching to only providing feedback and feed-forward. Three of the teachers were very reluctant to take any form of control. With these teachers, I encouraged them to take small sections of the lesson, for example, the warm-up or to explain the activity or to organise the students into the groups with my support. Gradually their confidence grew, and they increased their involvement in the lessons. Tara (Beach School) pointed out that “the minute I started to co-teach, and you stepped back and observed was when I really started to learn” (Individual Interview).

The data collected from the field notes during the three years of the programme drew attention to the limited amount of time before or after the lesson. It proved challenging to talk to the teachers to discuss who would be leading which part of the lesson or the subsequent one. The issue of time available for discussion with teachers is a limitation and will be considered further in the following chapter.

Teachers regarded feedback and feed-forward as another critical aspect of the PL programme. They said it allowed for the development of their confidence and extension of their understanding of the subject, especially within the lessons when co-teaching occurred. Laura (Ocean School) said that “having an expert coming in, working alongside you and guiding me throughout the lessons by giving me feedback, I really loved that” (Individual Interview). Diane (Ocean School), a

beginning teacher, Rachel (Ocean School) and Millie (Beach School) all reinforced these opinions:

*I think it was good, it helped me as a beginning teacher, it was extra PL for me, but I felt that 'oh Nikki is going to be there to support me when I take the lesson'. The input was always good because you told me what I could do next time or maybe change this or you did that really well. So I got positive feedback and things to work on (Diane, Ocean School, Group Interview).*

*You always gave us feedback, when you were modelling first. There was a lot of talking at the same time and even when we were doing it together we were talking 'oh ok, oh yeah', so feedback and feed-forward were given during the lesson (Rachel, Ocean School, Group Interview).*

*We could ask for feedback, and you were able to give that to us, so that improved our practice. It gave me more confidence when I took out my class on my own, so the feedback on the lessons that we took was really good (Millie, Beach School, Group Interview).*

Evidence from the co-teaching opportunities showed that the focus of the feedback and feed-forward varied depending on the teachers. Much of the feedback consisted of organisational information in the first instance, with additional assistance on questioning techniques to enhance the students' understanding of the games. Examples taken from the field notes included organising teams in a controlled manner so they could see who was in each team and if any students jumped across to a different team because they did not like someone in that team. Also, how to stop one of the small-sided games while the others played on, so questions or instructions could be given to that game without stopping everyone. In some cases, the feedback/feed-forward concerned how to introduce a skills practice, with the necessary teaching points to improve the students' practical performance of the specific skill.

Teachers valued the feedback and feed-forward provided within the lesson context, however, some were unsure whether there was a need for additional feed-forward to be provided through syndicate meetings. Mary (Beach School) suggested, "maybe twice a term to meet with you as there wasn't always time to talk after the lesson" (Group Interview). Despite this suggestion, she followed up her comment with "but I know we are all busy with syndicate meetings and other stuff". Tara

(Beach School) concurred with these thoughts by stating, “we are all very busy, and I am not sure there would be time for any more meetings to discuss these issues”.

An issue raised by one of the respondents concerned the consistency of the feedback and feed-forward provided. Sarah (Beach School) felt that this was not always provided equally to the teachers, she expressed:

*Because sometimes when you hear teachers say things like ‘oh Whaea<sup>15</sup> Nikki gave me positive feedback today’, and then somebody else said they went into a lengthy discussion, and some of us don’t get any of that, you start thinking ‘am I doing something wrong’” (Group Interview).*

The inconsistency is a valid point raised and will be discussed in more detail in the Discussion chapter.

### The nature of the programme

This section used the data gathered to examine the teachers’ response to the curriculum model of *Teaching Games for Understanding* (TGfU), the resources produced to enhance the delivery of the programme and the concept of sustainability.

#### *Teaching Games for Understanding-an organisational strategy*

The pedagogical model chosen to facilitate the delivery of the PL programme was TGfU. Choosing an appropriate pedagogical model was important to allow the teachers to gain an understanding of a model where opportunities for the involvement of all the students are provided. From anecdotal evidence obtained in the initial meetings, the teachers raised concerns that they did not know how to ensure the engagement of all students in the lessons. Before the programme, many teachers from both schools felt that large numbers of students were waiting for their turn to either play in games such as basketball and netball or to have an attempt at batting in softball or cricket. As a result, the majority of the teachers found student behaviour to be unacceptable. The intention was to provide strategies for teachers

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<sup>15</sup> Whaea is a Māori word meaning mother, aunt, aunty. In NZ primary schools it is used by students along with the teacher’s first name as a term of respect, rather than using Mrs or Miss. The male equivalent is Matua.

through the TGfU approach to enable all students to be involved and engaged in the activities.

The majority of teachers were of the view that being able to break the sports down into modified games meant the teaching had become more manageable. Teachers found this approach to be successful as it enabled them to manage the students in a more organised way. Linda (Beach School) commented that “having small groups, so they don’t sit around being a spectator is much better, they are all participating” (Individual Interview). “Everyone keeps moving with this now, and everyone is participating” was the reaction of Skye (Ocean School, Group Interview) to the TGfU approach to teaching PE.

An additional positive comment for this approach came from Judy (Ocean School) who had previously remarked that PE was such a huge subject with so much to teach:

*The skills are broken down so I can teach the children the attack, defence skills and they can practise passing the ball. Or they can practice those kind of things in a modified game as opposed to me going out and teaching them a full game of softball which is huge and you are never going to get through it all (Group Interview).*

As a consequence of teaching PE using this model, teachers’ confidence increased as they could see an aspect of PE in a more structured and organised way. Evidence of this was seen during the co-teaching that occurred during the programme. The teachers felt confident about their ability to organise the students and explain the game/activity the students would be participating in and then drift between the games to ensure the students were on task and to provide feedback and feed-forward. Furthermore, this was especially evident in many of the lesson observations completed during the data collection phase of the research, as the teachers were organising their lessons with two, three, and sometimes four games played concurrently.

Examples of teachers displaying their increased knowledge were observed through the games being stopped either as a whole or one at a time. Evidence of the increased knowledge albeit around the *New Zealand Curriculum* (NZC) strand B concerning Movement Concepts and Motor Skill (Ministry of Education, 2007a)

was through the teachers questioning the students about what was happening during the games. Illustrative questions included “what can the fielding team do to reduce the number of runs the batting team are scoring?” or “what strategies can the batter use to reduce the chance of the fielders getting them out?”

Some teachers then provided feedback and feed-forward (such as additional strategies to reduce the number of runs scored) to the students to enhance their learning and understanding of the games and to ensure the students were learning and not just ‘playing’. Tara (Beach School) provided a good illustration of this with regards to how important the small-sided games are to allow the interaction with the students:

*I think that feedback and feed-forward has sort of become really ingrained in us now and so in order for that to happen ... have to have them in small groups, ... have them talking, this wouldn't work if you had two large teams, one team fielding and one team waiting to bat in the striking and fielding games (Group Interview).*

Although some teachers provided feedback and feed-forward to the students, many were observed struggling with this process. These issues will be discussed later in this chapter. The use of the TGfU model appeared to provide an organisational strategy for the teachers. The following discussion chapter will discuss further if this has allowed for the development of PE content knowledge (PE-CK) or just provided a means to make PE more manageable.

### *Resources*

Before the commencement of the PL programme, teachers were provided with resources as indicated in the previous chapter. The main resource consisted of cards featuring the activities of the units of work (an example is shown in Appendix A). The cards were formatted to employ a TGfU approach where small-sided (teams of only three or four players) modified games were used to teach the concepts of the games. As previously detailed in Chapter Two, the TGfU approach is a student-centred model, that allows the students to use various skills, such as problem-solving, decision-making, and exploration to identify and learn the technical and tactical skills needed to be successful in the games. The resource cards specified what equipment and the quantities required to deliver the activity and a diagram to

show the layout and the limited number of rules. Also, focus questions were suggested to prompt the teachers when questioning the students on their learning.

The simplicity of the cards and the focus questions were seen to be very beneficial by the teachers. Mary (Beach School) referred to the resources as “just amazing and fantastic” (Individual Interview). Rachel (Ocean School) commented about the user-friendliness of the cards, “you gave us the wonderful resource that we can use, it’s laminated, it’s user-friendly and that’s really good because you can take the sheet outside with you, and not the whole folder” (Group Interview). Becky (Beach School) observed that “you can just look at the card, and ok we need 3 cones and a hoop and a ball ... you know we don’t have to spend hours organising things, which makes it easier to get it done” (Individual Interview).

Saving preparation and planning time for the lesson appeared to be of significant importance, as highlighted by Tara and Mary both of Beach School:

*I like the folder where it has got a few games for each area and then you’ve got your warm-ups, everything is there. I don’t have to do a lot of thinking about it because my planning takes hours and hours for all my other subjects, so it is really good that I can just pick it up and go right there’s my lesson. You know it’s so much easier than having to look for activities (Tara, Beach School, Individual Interview).*

*It’s not just PE on our minds, and that is why for you doing the plans and everything for us has taken a huge load off our shoulders because it’s very user-friendly and we have seen you modelling it (Mary, Beach School, Group Interview).*

Some comments made by the teachers when questioned about their attitude towards PE focussed on the fact that PE was such a huge subject. They felt overwhelmed, as they believed they did not have the subject knowledge or confidence to teach the activities. It was as a result of these feelings that some teachers said they would avoid or not look forward to teaching PE. From their responses, it appeared that the resources might have alleviated some of these worries for some of the teachers. As explained by Rosie (Ocean School):

*The resources you gave us made up of the cards, and everything has just made it so much easier, you have broken it up into all these little areas, which for us teaching the skills has made such a difference, it’s all there in front of you (Individual Interview).*

Despite the consensus from the teachers being that the resources were ‘fantastic’, ‘excellent’, and ‘user-friendly’, a discussion is needed in the following chapter around whether reducing the amount of planning time for teachers is further marginalising the subject of PE in schools.

### *Sustainability*

Members of the SLT of both schools expressed reservations about whether the programme could be sustained. The sustainability of a PL programme is important if the knowledge learnt is to be retained and disseminated to other teachers who join the school to ensure the continuity of the programme, and if this type of programme is to be repeated in the future. Holly (Beach School) pointed out that, “I would like to see what you have put in place, carry on, but there will have to be leadership, it will have to be led by the senior leadership team” (Individual Interview). For the programme to be sustainable Lindsey (Ocean School) believed that the teachers involved needed to ensure this happened:

*It will be the staff that are currently here who will need to make it happen because they will have to induct the new staff. It is always hard when you have got new staff because they have got new things, new ways, a new school to learn about and you know some of them are beginning teachers. So that’s probably where I would be looking at next, who is going to help keep that sustainability? (Lindsey, Ocean School, Individual Interview).*

These are the views from the SLT in the schools but concurred with the opinions of the teachers. Teachers believed the programme was potentially sustainable if there was a teacher responsible for overseeing the programme. They were also of the view that there needed to be time available for the teacher to achieve this. Tara (Beach School), a syndicate leader acquired a new member of staff to her syndicate this year, who had not taken part in any of the PL programme. In the individual interview, I questioned Tara about the process she had employed to ensure that this teacher was providing the same PE opportunities and experiences for her students as the rest of the teachers were in the syndicate. She acknowledged the need to induct the new teacher into the programme, however, conceded:

*I haven’t done anything as yet; I have shown her the folder that we have. I would rather her find her way and then maybe in term two have a look and see if I can help her then, maybe give her some suggestions about breaking her class down into groups. But yeah at this stage I think when you have got someone who just*



amount of time used to deliver the initiative, the importance of relationships, the PL being set in an appropriate context and finally the need for collaboration.

#### *The amount of time available for the professional learning*

All the teachers were positive about the amount of time spent each week involved with the PL programme. However, at the beginning of the initiative, some teachers were sceptical and unsure that the weekly sessions were necessary. Mary (Beach School) expressed these sentiments:

*At first, I thought, a lesson every week, oh no I am not looking forward to that. But once I got into it, my thoughts changed, once a week was excellent it gave me a much better opportunity to learn and practise things, and with you there to help me. I feel I have learnt a lot, and I am much more confident teaching PE now, and I know my syndicate feel the same (Field Notes-Tuesday 30<sup>th</sup> July 2013).*

The teachers all agreed that sessions once a week were essential, “if we didn’t have a session once a week we wouldn’t have been able to see how to use the resources” (Linda, Beach School, Group Interview). Skye (Ocean School) concurred with Linda’s comment by noting, “once a week meant we could see the lessons being modelled and then being able to co-teach with you” (Group Interview). Another teacher also remarked, “I liked it once a week for the whole year as I got to see the whole programme and how to do it” (Rosie, Ocean School, Group Interview).

#### *Relationships*

In both schools, I was referred to as Whaea Nikki by both the teachers and the students. From the outset being called Whaea Nikki gave me a sense of belonging to the school. However, during the first couple of weeks when I went into the schools, I felt a little uncomfortable, as I still regarded myself as a visitor. Once the students became to recognise me more in the playground and around the corridors, I began to feel less like a visitor and more like a member of staff within the schools. The students started to accept me before the teachers did. For example, when I walked through the playground, or into a classroom the students would immediately stop what they were doing and shout out, “Whaea Nikki, Whaea Nikki are you coming to teach us today?” and they would have big smiles on their faces. I am certain that the teachers began to accept me more due to the student approval. An

example of how much I became part of the primary schools is illustrated in my field notes from Tuesday 21<sup>st</sup> June 2011.

*Tuesday 21<sup>st</sup> June 2011 was my first day back at Beach School after spending three weeks overseas due to the passing of my father. I returned, but I was not as outgoing as I normally was when I was in the schools and I was feeling understandably emotional. On entering the staff room, I was approached by nearly all the staff to offer me their condolences and asking if there was anything that they could do for me. Mary came to me and asked if I would come to the classroom with her first before going out to the playground; I naturally obliged not knowing the reason for this. When I got close to the classroom, several of the students came running up to me and hugged me, and asked if I was ok and telling me they were sorry to hear about my father.*

*After entering into the classroom, one of the students asked me to sit on a chair they had placed at the front of the room while the students organised themselves on the mat. A different student then stood up and spoke in Māori and then translated to English, he told me that they were deeply sorry about my father passing away and that they hoped that me and my family were coming to terms with our loss. After this, all the students stood up and sang a waiata<sup>17</sup> for me and then three students presented me with sympathy cards handmade by them.*

*As the day progressed, I was presented with cards from each of the classes. One of the teachers explained to me that when they had told the students that I would not be in school for a couple of weeks as I had gone overseas for my father's funeral, it was the students who suggested that they make me cards for when I returned.*

*The same situation was repeated when I went to Ocean School; cards were given to me, and students came up to me to give me a hug and made sure I was ok.*

The situation described above took me by surprise and finding out that the teachers and the students thought so much of me in just a short space of time was humbling. The strategy of immersing myself in the culture of the schools to ensure that although, I was considered the 'knowledgeable expert', I was also regarded as part of the fixture and fittings of the primary schools proved to be beneficial for me.

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<sup>17</sup> Waiata a traditional Māori song which is an integral part of formal speech-making and a vital way of expressing yourself, both traditionally and contemporarily.

Through the immersion I was able to develop the relationships required to support teacher learning.

The relationship between myself and the teachers appeared to be crucial. All the teachers interviewed and involved in the PL programme referred to how important this relationship had become. They referred to the need for the facilitator to be approachable, knowledgeable, adaptable, and sympathetic to the needs of a generalist teacher. Debbie (Ocean School) felt very strongly about the need for the facilitator to be sympathetic and aware of her needs:

*I am not a specialist PE teacher, but I want to learn and develop, but I don't want a specialist coming in and telling me I am doing it all wrong. I need someone to work with me and encourage me, that works the best for me! (Group Interview).*

In addition to the approachability necessary for the teachers, Diane (Ocean School) pointed out that the facilitator had to be approachable to the students.

*Most specialists come from a secondary background and probably haven't got much experience working with younger children. Therefore, any facilitator coming in to work with me has to develop a relationship with my students as well as me, or else it doesn't work as well (Group Interview).*

In the individual and group interviews, one of the questions concerned what key attributes, both personal and professional were needed by a facilitator. From the data obtained themes were generated, and the list of crucial attributes was compiled. The following is a list of personal characteristics required by the facilitator according to the participants:

- Charismatic
- Confident and Passionate about delivering the content
- Approachable
- Hands-on
- The ability to make the participants feel comfortable
- Understanding (not intimidating)
- Flexible, with the ability to change the plan
- Patient

The professional characteristics consisted of:

- Being passionate about the programme content
- Being knowledgeable in the context of primary schools
- Having the ability to demonstrate good practice
- Engaging the participants in the programme
- Having the ability to differentiate the programme to meet the needs of the participants
- Having effective communication skills
- Being culturally and contextually aware of the environment
- Having excellent classroom management skills and strategies
- Having a proven track record in teaching (the facilitator has earned their stripes in the classroom).

A discussion will take place in the following chapter regarding how important these attributes are when developing relationships with the participants.

#### *Professional learning being contextual*

From the interviews and field notes the teachers were of the view that any PL they participated in must be contextual and relevant for them. The majority noted that they preferred PL that took place within their school and not at a hotel or conference centre, where they could not relate to the content or context. Judy (Ocean School) observed, “it has to be in school, I really want to see it modelled with the kids, with my class so I can see how it’s done” (Individual Interview). In support of this Joanne (Beach School) explained, “I need to see the facilitator ‘walk the walk’ and teach a whole lesson to see how it is done, not just say this is how it’s done or do a PowerPoint presentation, I want to see it work with my class” (Group Interview). Diane (Ocean School) also referred to the fact that she favoured PL that was “hands on, and I can see it in action” (Individual Interview). The concept of the PL being contextual will be discussed in detail in the following chapter.

#### *Professional learning being collaborative*

One of the intentions of the PL programme was that it would be collaborative between the facilitator, the schools, and the teachers involved. From the data collected from the interviews and field notes, it was apparent that this intention had

not been fully achieved. The following excerpt from the field notes after attending a syndicate meeting at Beach School highlighted my concerns surrounding this issue of collaboration:

*The meeting tonight was to discuss the upcoming year of the programme (second year). The structure has changed from individual teachers to working with the year 3 & 4 syndicate; therefore, I wanted the teachers to have an input into what we did throughout the year. It was obvious that they just wanted to be told what to do, for me to plan the programme for them to follow. When I suggested they gave me some ideas and then I would go away and put something together and bring it back to them at another meeting, it was very clear they did not want another meeting to discuss the PL as they were very busy and did not have time to add in another meeting. (Field Notes-Monday 20<sup>th</sup> February 2012)*

Despite the teachers supporting the amount of time spent during curriculum time, they suggested that additional time spent collaborating and developing the programme would be difficult. Tara (Beach School) commented, “I don’t think time would have allowed us to have any more collaboration, but I thought it was fine” (Group Interview).

In addition to the lack of time available in syndicate meetings for discussion and development to take place, it seemed that the teachers were content with being told what to do. Helen (Ocean School) commented, “I am quite happy to be told what to do, as long as I am learning something and I can see the benefit of it for my students” (Group Interview). This comment was supported by Millie (Beach School) who remarked, “I am not a specialist in PE, so I just need to be told what to do” (Group Interview). The notion of time and the use of available time will also be discussed in the next chapter in detail.

### **Teacher change**

Teacher change is an essential aspect of any successful PL programme. The next section details the changes in the teachers’ attitude and confidence as a result of participating in the PL programme and the value of PE as seen by the teachers.

### Confidence after the professional learning programme

In the individual and group interviews, all 18 teachers identified increased levels of confidence to deliver PE. Teachers commented, “I feel more confident that I am doing what I am supposed to be doing. It’s made a huge difference” (Laura, Ocean School, Individual Interview). Tara (Beach School) provided a further example by informing me in our first meeting that she ‘hated teaching PE’, as she did not feel confident (Field Notes-22<sup>nd</sup> February 2011). However, after participating in the programme during the second year and then following it on her own for a year, her level of confidence had significantly increased, and the following comment highlights this:

*It’s funny because now that I am out there, it’s just like, I do it without thinking. You know it’s not like, oh its PE and I have no idea what I am going to do, it’s like oh yeah it’s a PE lesson, and this is what we normally do. Now I just feel like an old hand at it. I’m not saying that I’m an expert by any stretch, but in terms of my confidence level, you know I am quite happy to take them out and you know I might have to read through the cards and read through it again. I might not necessarily get all the rules right, but it’s like, that’s ok (Tara, Beach School, Individual Interview).*

The comment made by Tara (Beach School) is indicative of the rest of the teachers who expressed the feelings of being more confident, and that they now enjoy teaching PE. “I do like it; I am not a PE specialist, I am not good at sport at all, but I do enjoy taking the students out for PE” (Donna, Beach School, Group Interview).

The SLT of both schools also noted an increase in confidence. Holly (Beach School) provided this as an example of the changes that she had seen in her syndicate, “there is enthusiasm, and discussion in our syndicates around PE and everyone is on board with what is happening”. Lindsey (Ocean School) remarked about the teachers having the confidence to deliver PE and how they now talk to each other about PE, which never used to happen and adds:

*PE has been one of the most frustrating curriculum areas I have seen here, and this is my 11<sup>th</sup> year so I mean that’s huge. A huge mind shift to go from having no one with any sort of inkling towards PE to having them all now more confident and teaching the skills (Individual Interview).*

### Attitude after professional learning programme

As reported earlier, before the programme the lack of confidence in teaching PE affected the teachers' attitude. Now, post the intervention the opposite effect can be recognised. The teachers were displaying confidence in themselves, and they were now portraying positive attitudes towards the subject. Laura (Ocean School) noted, "It [the PL] has changed my attitude towards PE" (Individual Interview). Margaret (Beach School) supported these sentiments by stating, "because of my increased confidence, my attitude has changed, and I can now see how important PE is for my class" (Group Interview).

A further reason for the change in attitude was highlighted by Becky (Beach School, Group Interview) who claimed, "well, I suppose you have made it easier for us. Oh my goodness yes, it has just made everything so much easier for me" (Group Interview). The notion 'PE is now easier' is corroborated by Judy (Ocean School) who remarked about planning, and preparation:

*I used to spend lots of time googling stuff, so if we were doing touch<sup>18</sup> because we used to do PE sport by sport, so I would have to go and find out what the kids needed to know about touch. I had a basic idea of the game, but then I had to go and isolate all the skills myself and then think what are they going to need to know. After that, I had to go and research warm-ups, drills and games as I didn't know how to teach it, and I had to do that every single time I had a PE lesson (Judy, Ocean School, Individual Interview).*

A comment made by Rachel (Ocean School) reinforced this attitude whereby she claimed: "last year [post PL] I didn't miss PE because even when the weather was bad, we always used the hall". Although specifically highlighted by Judy, other teachers remarked that the reduction in the amount of time spent planning and preparing for PE lessons was a significant reason for the change in their attitudes.

In the same way that the teachers acknowledged there had been a modification of attitudes, the SLT of the schools also recognised these changes. Lindsey (Ocean

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<sup>18</sup> Touch or Touch Rugby is a game derived from Rugby and Rugby League. It is similar to Rugby, however, it is a minimal contact sport without tackling, scrums and kicks, and the aim is still the same to score tries. The game requires very little equipment—a flat playing surface and a ball; there are no goal posts. This game is very popular in New Zealand and Australia. Games are played at a competitive and social level with men's, women's, mixed and junior teams.

School) said, “teachers appear happier now because it is a known, they know what they are doing which has resulted in the ‘mind shift’”. The attitude change has resulted in more discussion in school surrounding PE as previously commented on by Lindsey (Ocean School). Michelle (Ocean School) reinforced this by confirming she had overheard conversations in the staff room where teachers said, “remember what Nikki said and how we organise the practice or the game”.

### Value and importance of physical education

In both schools, PE was a timetabled subject, and there was an expectation from the SLT’s that it was taught twice a week. However, what was taught was not PE as it is articulated in the NZC. Students were observed playing sports, where two large teams were organised, and a game was played for the lesson (Field Notes-Term Four 2010). There appeared to be no programme of study that was followed by the teachers in either school. Despite the expectation from SLT of both schools PE appeared not to be monitored, and some teachers avoided teaching PE for weeks at a time. Ashley (Ocean School) provided an excellent example of this from an informal conversation at the beginning of the third year of the programme. She declared that “we have not had a PE lesson for the past four weeks due to the weather and outside groups coming into the school” (Field Notes-Monday 2<sup>nd</sup> September 2013).

PE was reported to the parents on the students’ end of year academic report; however, further investigation revealed that in both schools the extent of the reporting was a tick in a box. Holly (Beach School) confirmed that “some students would receive a comment but not all” (Individual Interview). Lindsey from Ocean School revealed that the comments made “are quite general such as ‘he can bounce a ball’, or ‘she has good hand/eye coordination’” (Individual Interview). Lindsey also acknowledged that this was not necessarily good practice by stating, “it doesn’t tell me about the child, or what he or she can do, for me that just told me the same for every other child in the school” (Individual Interview).

From observing the teachers over the three years, the value and importance placed on this curriculum subject were varied and inconsistent. There appeared to be a

mismatch between what was portrayed and spoken about, and the reality of PE within the schools. However, teachers' attitudes and understanding have changed throughout the PL programme; therefore, a consequence may be a change placed on the value of PE within the school.

From the observed lessons both prior and post the PL programme, the students' perception of what PE means was also confused. Due to the previous teaching styles employed in PE lessons where students predominantly just 'played' the sports in a recreational manner but, now are being asked to think about what they are doing and make decisions and solve problems, students were confused about what PE means. Examples of students questioning what they are doing with a negative approach and complaining about having to stop performing to answer questions were frequently witnessed throughout the programme and subsequent lesson observations (Field Notes-Term One 2014).

In the third observation lesson of Joanne (Beach School), the TGfU model was being followed in the lesson, when she asked the students to stop what they were doing and come around to recap and reinforce the learning. The request was met with several of the boys making comments such as "why do we have to stop; why can't we just play?" (Field Notes-Tuesday 18<sup>th</sup> March 2014). Remarks such as these underpin the concept that the students did not fully understand the role, value, or the content of PE. This view was not the fault of the students, but a consequence of how they were used to being taught PE and, therefore, a mind-shift was also needed from the students to understand fully. This situation will be discussed further in the following chapter.

### **Changes to pedagogical knowledge**

The evidence presented in this section depicts the teachers' learning about general pedagogical content knowledge (GPCK) and PE pedagogical content knowledge, (PE-PCK) detailing both the positive aspects and the areas that need to be taken into consideration for future development. Data was collected from the 67 completed lesson observations (each of the 18 teachers were scheduled to be observed four times during Term One). Five of the planned lessons were not observed due to various reasons. Reasons were (number of occurrences in

brackets), inclement weather (2), another activity took priority (2) and confusion around the time of the observation (1).

### General pedagogical content knowledge

Just four aspects of GPCK are focussed upon in this section:-organisation, classroom management, questioning and feedback/feed-forward. I acknowledge that there are many more aspects of GPCK that could have been considered, however, from the data analysis it was these four that developed into the dominant characteristics. The evidence provided details on how the teachers have changed their teaching practice concerning each of these four factors.

#### *Organisation*

In the initial conversations, teachers expressed concerns about the lack of knowledge to organise PE lessons appropriately to ensure students were fully involved and engaged in the lesson. Lack of organisation was observed in the initial observations before the PL programme commenced. Examples included teachers not having the correct equipment available for the game, being unsure of how to set up the equipment correctly and trying to place equipment out on the field while at the same time manage the students in the space (Field Notes-Term Four 2010). Through the modelling of lessons, teachers were exposed to strategies to enhance this ability and, as a result, many teachers showed improved organisational skills.

Two teachers (Tara and Linda, Beach School) who taught PE after a break (interval and lunchtime) were observed setting up their equipment during this break time so that it was ready when the class went outside. When I questioned Tara why she had decided to set her equipment up during this time, she responded with “I spend this time organising my equipment so that I am not spending time organising the equipment while I am trying to organise the students as well” (Field Notes-Wednesday 19<sup>th</sup> March 2014). From observing these lessons, the strategy of setting up the equipment contrasted with teachers of older students who used the concept of PE monitors to set up the equipment. The PE monitors would be sent out a few minutes before the class started to organise the equipment and then at the end of the lesson be left to collect and return the equipment.

In the post-intervention observed lessons many teachers were organised and prepared as they had organised the equipment they needed for the lesson, they knew how many groups of students were required for the activities, and there was a flow to the lesson from one activity to the next. It was noted that as teachers became more confident and their knowledge of the activities increased that the organisation became more effective. The teams and the equipment were organised efficiently, the students knew what they were to do, and they became active in the lesson very quickly (Field Notes-Term One 2014). Nevertheless, some teachers displayed some instances that did not highlight good examples of organisational skills. Examples of poor organisation observed were not ordering the equipment on time, which resulted in a delayed start to the lesson (Field Notes-Friday 21<sup>st</sup> March and Thursday 27<sup>th</sup> March 2014). Also, some teachers struggled to arrange the teams in a controlled manner, which caused teams to be uneven in number or confusion amongst the students not knowing of which team they were a member. Further examples were concerned with time management during lessons where a significant portion of the lesson was spent organising teams or equipment or explaining what the students were doing in the lesson. The consequence of this lack of organisation was that the already short lessons (30 minutes for some) were reduced to approximately 15 to 20 minutes of activity for the students and potential time for learning (Field Notes-Tuesday 25<sup>th</sup> February 2014).

Time management was an aspect of organisation that has been highlighted as an issue by some teachers. Through the observations, there were instances when the teachers' lack of time management skills resulted in issues that could have been avoided if care had been taken to ensure teams received an equal number of batting opportunities. From the observations, it was noted that students preferred to bat rather than field, and on a few occasions, teams did not have an equal number of batting innings, which caused some students to become frustrated and some displayed unacceptable behaviour. Teachers appeared not be conscious of the remaining time available in the lesson, and strategies were not employed to avoid these situations. Acknowledgement needs to be made that the observation schedule caused some timing issues but these did not affect the situations described.

### *Classroom management*

The aspect of classroom management was closely linked to the above section of organisational skills, as some teachers appeared to have difficulty managing their students in an environment where there were fewer boundaries than in a classroom. The initial observation data showed that some teachers seemed to struggle with this aspect due to students being able to move around the space and not confined to a desk and chair. Examples observed were of students (boys) once they were on the field, running around, chasing each other and the teacher shouting instructions in an attempt to bring them back together to start the PE lesson (Field Notes-Term Four 2010).

Despite classroom management strategies being demonstrated throughout the PL programme, in post-PL discussions, two teachers reported concerns about having more than one game operating at a time. They claimed they could not fully supervise all of the students, all of the time. An example of this situation was observed from Becky (Beach School) when organising her lesson; the students were to be playing two games of 'hit 2 and go', and the equipment had been placed very close together which was a safety concern. With safety in mind, I suggested they be spread out further, but her response was "I want the games close together so that I can keep an eye on them better; if they are too far apart they argue" (Field Notes-Tuesday 4<sup>th</sup> March 2014). Being able to supervise students adequately is a legitimate concern. However, if the students' games were too close together, there was potential for further problems to arise. For example, arguments could develop due to the ball straying into the other area, and students could run across the other game, in addition to the already mentioned safety issues.

A further issue of classroom management evidenced from the observations was of some students who were not fully engaged in the lessons. On numerous occasions students were observed playing with the spare equipment that was placed at the side of the games or while fielding-talking, dancing or performing cartwheels. In some instances, teachers recognised these issues and attempted to rectify the situation such as Debbie (Ocean School) who kept the spare equipment well away from the students when they were playing to keep them focussed on the tasks/games. Additionally, many teachers when they saw students participating in these

unacceptable activities were very quick to point out that was not what was expected of them while they were fielding. Linda (Beach School) was frequently heard questioning students in her class “how can you be a part of the team when you are not concentrating and doing that?” or “do you think doing cartwheels is helping the other players on your team?” However, some allowed it to continue, for example, Ashley (Ocean School) was observed watching students playing with the spare equipment and allowed it to continue.

Through discussion with teachers, there was recognition that there had been a significant improvement although there could be more. The observation data showed that the limited participation was an issue that needs to be considered.

Rosie (Ocean School) pointed out:

*We have a lot more students involved now we are using the TGfU model, but I know in my lessons there are some students who are not engaged. I need to work on this and make sure that they are all engaged and learning and improving their PE skills (Individual Interview).*

From the observational evidence, many teachers gained the classroom management skills at different rates and some struggled to see the issues. However, once the issue was identified to them, they acknowledged the issue and attempted to rectify it. Despite these concerns that have been recognised, a positive feature of the lessons was identified, there was excellent involvement by the majority of students in the activities, and the majority of students were engaged in the lessons. Therefore, teachers were organising activities that ensured the majority of students were active.

The management of students who were unable to participate in the PE lessons emerged as an additional issue that required attention. The reasons for not participating were wide-ranging. In most of the observation lessons, there were non-participating students, who were left to sit at the side; therefore, they were not involved in the lesson and not engaged in any learning. The question arises would that be allowed to happen in a classroom lesson? A slight change to the teachers’ classroom management skills would alleviate this issue as they could be involved through a refereeing or coaching role.



things happening so that you can question the students, you made it easy” (Group Interview).

Teachers during the observations showed an increased use of feedback and feed-forward with the students and understood there was a need to travel between the two or three modified games in which the students were involved. Many teachers were observed stopping the game at appropriate times for teachable moments where questions were asked, or rules were reinforced, or praise and positive comments were given to the students. Joanne (Beach School) provided an example:

*Joanne*            *What could you have done better, so Student 1 didn't score as many runs?*  
*Student - 1*       *Get the ball into the hoop quicker.*  
*Joanne*            *So what do you need to do, so it gets in the hoop quicker?*  
*Student - 2*       *Only have one person by the hoop.*  
*Joanne*            *Yes, if you only have one person at the hoop you won't get in the way of each other and also throw the ball quickly and accurately.*  
*(Field Notes-Tuesday 25<sup>th</sup> March 2014)*

It must be noted, however, as with the aspect of questioning, limitations occurred with some of the feed-forward. Teachers could identify aspects of students' performances that were not working, yet, they were observed being unable to provide the necessary feed-forward to allow students to improve and progress in their learning.

*An example that demonstrates this was observed in Judy's (Ocean School) lesson, the third of the four observed lessons. She had organised the students into two modified games, and she was floating between the two games, observing the students, and talking to them as they played. After the students had been playing for approximately 10 minutes, she stopped one of the games and called all of the students in close to her. Once they were in close the following conversation occurred, she asked the batting team;*

*Judy*                *What can you do to try to score more points?*  
*Student 1*         *We need to hit the ball to spaces where there aren't any fielders.*  
*Judy*                *Why do you need to hit the ball into spaces?*  
*Student 2*         *Because it will take the fielders longer to get the ball, so we got more time to run.*  
*Judy*                *Good so when you are batting you need to try and hit it into the spaces.*

*The students were then dispersed to continue to play. The observation continued with the students demonstrating the same as before the teacher's input, hitting the ball into the middle of the pitch where the majority of students were stood fielding. The opportunity was missed to provide the students with feed-forward surrounding ways of changing the direction of the ball when batting, such as moving the feet to change the point of contact of the ball. This feed-forward would have allowed some of the students the opportunity to improve their batting technique and progress their learning around batting technique and scoring more points. (Field Notes Wednesday 9<sup>th</sup>-April 2014).*

This section of questioning and feedback/feed-forward has highlighted that there appeared to be an issue with teachers' lack of the PE-CK and will be discussed further in the subsequent chapter.

#### Physical education pedagogical content knowledge

The following section examined the data relating to PE-PCK. The analysis of the data generated the following five themes as important from this study. It is acknowledged that there are numerous aspects associated with PE-PCK; however, for this research, I have focused on only five:

- *Teaching Games for Understanding* pedagogical model
- Use of demonstrations
- PE content knowledge
- Teacher involvement
- Knowledge of learners

The evidence provided examples of how teachers have changed, and of how their practice has developed concerning each of these five factors.

#### *Teaching Games for Understanding pedagogical model*

The majority of the teachers used the TGfU model as the basis of their lessons and commented on how they found TGfU made teaching PE easier. Mary (Beach School) referred to the ease, to which the lessons progressed:

*In all the striking and fielding and invasion games you started very basic and gradually built it up making it more complicated and more difficult, but it is still easy for me to understand as there are only a few rules for each of the games (Group Interview).*

Laura (Ocean School) also remarked, “the model is really good because you can apply the same modified games to different sports” (Individual Interview). Donna (Beach School) supported this remark by adding, “in striking and fielding they are the same games, but changing the equipment changes the skills that they are practising!” (Group Interview).

The teachers had developed their understanding and appreciation of the concept of TGfU through the modelling and co-teaching of lessons involved throughout the programme. Despite this, three of the eighteen teachers were reluctant to employ the model once they were in sole charge of their lessons. The reasons for the reluctance and apprehension stemmed from their concerns surrounding safety and the use of the bats in the striking and fielding unit of work and students playing when they were not supervised fully. Comments were expressed such as “I cannot supervise both games at the same time, what happens if a child gets hit with a bat?” (Sarah, Beach School, Field Notes). Becky (Beach School) noted her worries with:

*If I have two games playing, I go to one game and that is fine but the other teams then start arguing with each other. So I go to that game to sort them out, and then arguments start in the game I have just left, so it is easier to have just one game (Individual Interview).*

An excellent example of what was intended was observed in Tara’s striking and fielding lesson (Field Notes-Tuesday 5<sup>th</sup> March 2014). Tara’s class were playing the Throw 4 and Go game (similar to scatterball), but instead of playing two separate games with four teams, she had adapted the resource to combine the games and teams together. There were still four teams (two teams fielding and two teams throwing (batting)); however, they were playing in one game. Team A and B were throwing, and team C and D were fielding. Team C was fielding the balls thrown by team A, and team D were fielding the balls thrown by team B. To help the students when fielding she had also adapted the equipment so that the tennis balls were of different colours (yellow and blue). So when the balls crossed, the fielding teams knew which colour balls they were to field. The diagram below shows how Tara organised the field of play.

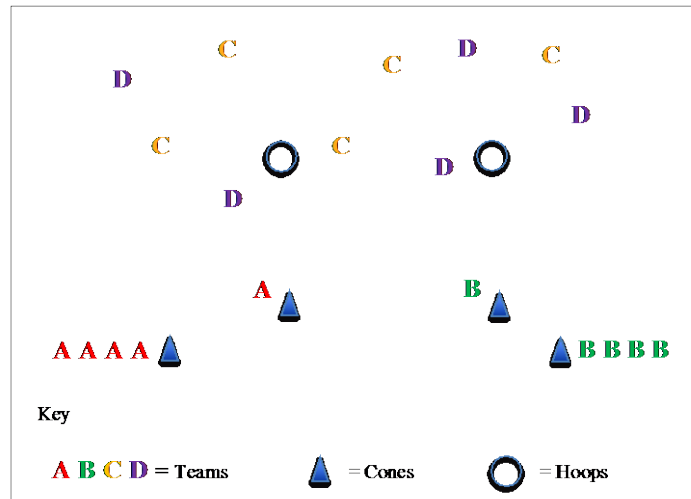


Figure 4: Set up for adapted game - Throw 4 and Go

I observed this game in all four of Tara's observed lessons. She modified the rules and changed the conditions of play in each of the four observations; there were changes and progressions in each of the lessons. During Tara's interview, I questioned her about the reasoning behind adapting the game so instead of playing the two separate games she had two games in one. Her response to my question was:

*Traditionally my class each year are of lower ability and with that often comes, behaviour problems. This year, with this particular class I wasn't keen on having my children spread into two separate groups. At this point in time, I don't think they have the maturity to be left umm, you know to run that game independently, that is my goal as to, you know, by the end as the year progresses, is to break them up into more independent groups. I think they will be able to do that but at this point, I need to keep them under my control, and organising the game in this manner I feel I achieve this. They are playing in small-sided groups with two games being played, but I have control over the games, and I can see everything that is going on (Individual Interview).*

The modification of the game to meet the needs of her class but maintaining the TGfU principle of organising small-sided games showed the teacher engaging with the curriculum model but not replicating what she has seen during the PL programme. This example is what was intended, teachers taking the ideas from the resources and adapting the modified game to suit the needs of their students.

A distinct contrast to this example was observed through a syndicate who had decided to deliver a unit of touch, despite the rest of the school following the programme and delivering striking and fielding activities in Term One. The pedagogy of the two teachers observed proved to be very different. One teacher, Rosie (Ocean School) adopted the TGfU model to teach the sport of touch, while Rachel (Ocean School) followed a sports-based pedagogy. From a conversation with the teachers in the syndicate the decision to change the programme to touch was based on their concerns over how the students played touch at intervals. They had witnessed the students arguing and interacting in a manner that did not display what they considered were the values of sportsmanship and thus wanted to try to address these issues. In essence, the reasoning for the change was sound, however, the solution appeared questionable.

Rachel acknowledged the TGfU curriculum model, however, informed me she had made a conscious decision to continue teaching PE how she had always done it because she thought they needed to be extended in the skills that they were learning:

*The students need to know all the skills to be able to play the game  
... I have extended them to teach them about offside and onside  
... I want to extend them from what is in the book [resource folder] so they are not just running all over the place and are developing their skills (Rachel, Ocean School, Field Notes-Friday 21<sup>st</sup> March 2014).*

From the observations, it was clear that Rachel (Ocean School) was very knowledgeable about the game. Nevertheless, the format of the lesson was very similar to a club training session. The evidence showed there were lots of drills and practices that were too complex for the majority of students. Much of the emphasis was placed on correct execution of the skills; however, many of the students found it difficult to throw and catch the full-sized balls. Despite the teacher's claim to extend and develop their skills, the observations showed the majority of the students did not progress in their learning or understanding of the game. Progress was not seen due to long periods of time where they waited for their turn, and having very little time to play. In the games observed during the last ten minutes of the lesson, two teams (six a-side) played, while two teams sat on the side-line, then the teams rotated around after five minutes. It appeared that the majority of the rules were enforced such as retreating 10 metres, rules concerning the 'dummy half' and

placing the ball down properly. The teacher was in total control of everything within the lesson.

### *Use of demonstrations*

The use of demonstrations within the PE lessons to enhance the learning of students was an important aspect of PE-PCK. Demonstrations allowed the students to observe the skill and comprehend what was needed to perform the skill or task through the visual form. However, not all teachers could use demonstrations as they were unsure of how or have the knowledge to do this. The following narrative provided from Skye (Ocean School) during a lesson in year two of the PL programme is an example of when she realised she did not have the subject knowledge to enhance her students' performance when hitting the ball in tee ball.

*It was a Monday afternoon, and I was working with Skye and Laura, as it was coming towards the end of the term they were both leading their lessons. I was moving between the two lessons, observing the teaching and giving feedback and feed-forward as necessary. I had been watching Skye's lesson from a distance, and everything looked to be going well. The students were playing hit 2 and go T-Ball with three teams, two teams fielding and one team batting. As I walked up to the group, I suddenly saw Skye call all the students in to sit down and as I got up to the group she said to me "it's all going wrong, and I don't know what to do!" My response was "it looked good from where I was watching from", through a brief conversation with her I established that the problem was that the students could not hit the ball off the tee stand. So this was affecting the quality of the game, and she did not know what to do to help the students.*

*After a brief demonstration of the batting technique and explanation to the students, the game was resumed. In my demonstration, I had broken the skill down to explain how the feet are positioned in relation to the tee, how to grip the bat, the arm action to swing the bat backwards and forwards just once and then emphasised focusing on the ball. As I stayed with the group to observe what happened, as each student approached the tee, Skye reinforced all the teaching points of the skill just as I had done a few minutes previously. This approach was replicated for students, from each team, for their first attempt at hitting the ball. Gradually through the lesson, the quality of the hitting improved and Skye's input to the students became varied depending on the student.*

*The following week in a conversation with Skye, she informed me that they had repeated the game the day before. The performance*

*of the students in hitting the ball was much improved and that had resulted in an improvement in the game and the students were again enjoying playing the game. In addition, she said that she had not realised how easy it was to teach the skills once you have broken it down to 'what the feet do, what the hands do, and the body action'. She was very pleased with herself that she could now assist her students to improve their technique in something that she did not think she was capable before. Throughout the rest of the year, I observed Skye using this system of breaking the skill down to improve and develop the students' technique in various skills such as throwing and catching, accurately kicking a football, shooting in basketball and hitting a tennis ball with a racket (Field Notes-Monday 26th March 2012).*

On a number of occasions, teachers were observed recognising the need to demonstrate a specific skill, for example, batting in the striking and fielding unit of work to improve the students' performances. Linda and Joanne (Beach School) and Skye and Judy (Ocean School) provided examples in the observed lessons. All these teachers identified the need to spend time demonstrating how to hit the ball from a tee stand. Each broke the skill into teaching points to explain how to perform the skill. In the PL programme these teachers had experienced this issue, and as a result, we had spent time examining through my demonstrations how to break the technique down to teach the skills.

However, teachers who had not experienced this issue during the programme did not have the knowledge to be able to demonstrate and explain the technique of hitting the ball. To assist the teachers after the lessons, I spoke briefly to them and explained how to break the skills down, to make it more manageable. After explaining this strategy, many of the teachers were observed attempting to explain and demonstrate the techniques for skills such as batting, bowling and throwing. From working with the teachers and the lesson observations, it appeared that the inability to use demonstrations effectively is closely linked to the following section.

#### *PE content knowledge*

All the teachers previously made reference to their lack of confidence in relation to their PE-CK concerning the sports and the rules. From the findings, I have identified three areas as significant in regards to teachers' content knowledge; how to ensure

progression within the activities, adapting the activities and the knowledge of the rules.

- *Ensure progression within the activities and series of lessons*

Progression should be apparent within the lesson and also throughout a series of lessons. The observations highlighted that many of the teachers were unable to progress the lessons sufficiently to ensure that learning was occurring. It was apparent that in many of the individual lessons minimal progression occurred either in the activities being undertaken by the students or in the students learning. Margaret (Beach School) provided an example where the second observed lesson of the planned four consisted of the activities 'whistle stop' for the warm-up and then 'throw 4 and go' as the main activity. The following week the warm-up for the lesson was 'numbers', and the main activity was 'throw 4 and go'. From the two observed lessons, the warm-up changed, however, the main part of the lesson was identical. There was no addition of extra rules or progression in the level of skills or thinking about the game expected from the students although by the end of the series progression could be seen.

However, it was only in the lessons of three teachers that I was unable to recognise the progression or progress of the students after the series of four lessons were observed. The first case where minimal progression was seen has previously been discussed, that of Rachel (Ocean School) in her delivery of the touch lessons. The other instances observed were with two classes of year 7 and 8 students. In these lessons the students were not challenged in the activities they were participating in, the games were too easy, so the rules and the activity needed to have been adapted. Changing the game to make it harder to score points would have resulted in the students using their decision-making skills to be successful and, therefore, rather than 'playing' the games their learning would have been enhanced.

- *Adapting the activities*

Few teachers were observed adapting the activities to ensure the students were learning in each lesson. Many found this task to be difficult, although through informal conversations it became apparent that the teachers could follow the resource cards and felt confident to deliver the activity as stated on the cards.

However, when adaptations were needed due to students finding the task too easy or in some cases too difficult, the teachers lacked the knowledge to be able to make the changes, for the lesson and the activity to progress. Skye (Ocean School) told me:

*While everything is going well and I am following the cards it is great but as soon as something doesn't work or I know I need to change it, I find it really hard because I know it needs to change, but I don't know what to do to put it right! (Field Notes-Monday 26<sup>th</sup> March 2012).*

The ability to alter the activities is an aspect that needed to be continuously considered throughout the lesson by the teacher. If the teams are too large, points are not being scored, or the game was breaking down in some way then adaptations are required. It was evident from the observations that the lack of subject knowledge was a reason why the teachers found it difficult to make the alterations to the activities.

- *Knowledge of the rules*

The rules for the activities are imperative to ensure that the games are played fairly, and all the activities on the resource cards have a minimal number of rules (approximately five or six rules). From the observations undertaken it was evident that the majority of the teachers knew and understood the rules of the games, however, they were not always consistent with the application of the rules. Evidence was seen in Ashley's lesson where on a couple of occasions when it was a close decision as to whether the player was out or not, she gave the benefit to the batter but then on other occasions it was given to the fielder (Field Notes-Thursday 3<sup>rd</sup> April 2014). When questioned by the students, no justification for the decision was given; the inconsistency thus caused some students to become confused, and in some instances resulted in inappropriate behaviour.

On other occasions, teachers were seen to be unsure themselves of the rules. Therefore, when explaining to the students it became very muddled, and in two instances I was perplexed, so consequently, the students must have been confused. Donna (Beach School) who wanted the students to play continuous cricket provided an example. Her lack of knowledge around the sport of cricket and her understanding of the game from the resource card resulted in the confusion.

Donna's explanation of the game resulted in the students not understanding, which led to a large amount of arguing between the students and inappropriate behaviour from some when they started to play. She did not know what to do to address the situation, so as a consequence I stopped the games. I explained again and used demonstrations to support the explanations, which assisted the students understanding the game and meant they could play relatively argument free (Field Notes-Wednesday 26<sup>th</sup> March 2014).

In the striking and fielding unit of work, it appeared that the teachers did not want to enforce the out rule. After questioning a couple of teachers for their reasoning behind this decision, their response was "if they are 'out' then they are 'out' and so, therefore, cannot take part in the rest of the game!" The teachers were unaware of strategies that enabled the 'out' rule to be enforced, and students are given 'out', but, instead of sitting out the rest of the innings, they joined the back of the line. In these cases, the 'three out, the whole team out' rules can be played. Examples, where the rules were applied, ensured the students had to concentrate more and decide whether to run or not which enhanced the decision-making skills. Again the lack of knowledge and ability to adapt the game had resulted in several teachers not enforcing the rules.

#### *Teacher involvement*

The data collected from the observations showed that the majority of the teachers were fully involved in the lessons, through either teaching within the games, umpiring or refereeing. They were observed reinforcing the teaching points and key competencies such as sportsmanship and students' respect for fellow players. In many cases, the teachers were heard almost continuously talking with students, questioning and providing feedback and feed-forward. Joanne (Beach School) commented, "I feel more involved in the lessons as I have the prompts from the resource cards about what things to look for, and questions to ask which makes me more involved and I think the students feel I am more involved!" (Group Interview). Some teachers, however, appeared reluctant and 'out of their comfort zone'. These teachers tended not to be involved as much as the others, and their communication with the students was noticeably reduced.

### *Knowledge of learners*

From preliminary observations and conversations made before the PL programme commenced, the teachers had a very sound knowledge of the students within the classroom in subjects such as literacy and numeracy. However, it appeared this was not the case regarding knowledge of students in a physical context. For example, in one lesson the students were allowed to select the teams. The result was two boys' teams, and two girls' teams and the teacher then organised games where the boys played against the girls. In some cases, this may be appropriate; however, this was not such a case. The boys were bigger in stature, stronger and had the superior physical ability to the girls. Despite the girls struggling to compete effectively, this situation was allowed to continue throughout the duration of the lesson.

A further example brought to light was in several of the year 3 and 4 lessons. Students were asked to count the runs the team scored; very quickly it became apparent that the students could not do this. Firstly, many did not know how to count the runs, and secondly, many of the students did not know how to count on, to add each batters score to the total, which resulted in the students guessing the actual score.

This section has highlighted the changes in teachers' pedagogical knowledge both general and PE-specific. For each of the aspects, positives changes have been observed, but, in addition, limitations and weaknesses have been noted. Further discussion will take place in the following chapter concerning these limitations and weaknesses in light of how much time was allocated to these teachers throughout the PL programme.

### **Chapter summary**

This chapter has outlined the findings from the data collected about the PL programme designed to increase the primary school teachers' ability to teach PE through increasing their confidence and their subject knowledge. The data collection methods were field notes collected throughout the three years of the PL programme. After the conclusion of the PL programme, lesson observations were undertaken, observing all 18 teachers who had been involved in the PL. The intention was to observe a series of four lessons per teacher over a period of eight

weeks during Term One, 2014. Due to circumstances and situations beyond my control, five observations were unable to be undertaken, resulting in 67 completed. Also, data was collected through nine individual interviews and four group interviews.

The findings related to the teachers' background stories regarding their opinions of PE before the implementation of the intervention were drawn together. The chapter then went on to highlight the teachers' views of the PL programme before outlining the changes the teachers have made in their levels of confidence increasing and the modification of attitude. Finally, this chapter has detailed the impact of the programme on the teachers' knowledge of GPCK and PE-CK.

## **Chapter Five: Discussion**

### **Introduction**

This chapter discusses the significant findings generated from the delivery of a Physical Education-Professional Learning (PE-PL) programme to the generalist primary school teachers. The chapter will be divided into the following three sections. Firstly, it discusses how the professional learning (PL) impacted on the increasing of participants' confidence to deliver Physical Education (PE) lessons. Secondly, the discussion highlights the importance of building positive relationships between the facilitator and the teachers involved in the PL programme. Thirdly, the discussion reveals attributes and responsibilities required by a facilitator for the PL to be effective.

### **Teacher confidence**

International (Morgan & Bourke, 2008; Sloan, 2010; Whipp et al., 2011) and local research (Gordon et al., 2016; Penney et al., 2013; Petrie, 2010a) has continued to highlight a pattern of low levels of confidence amongst generalist teachers who are expected to teach PE. The teachers involved in this PL programme were no different to others, in that they too lacked the confidence to deliver PE lessons. Given that the PL programme investigated in this research was primarily focused on enhancing teacher confidence it is important to begin by discussing three aspects of the programme that appeared to have contributed to increasing the confidence of the teachers. These aspects included (i) the use of resources, (ii) the use of modelling and co-teaching strategies and (iii) features within the *Teaching Games for Understanding* (TGfU) pedagogical model. The following sections will discuss each and the additional consequences that have resulted, despite the teachers' confidence growing.

### Resources: a catalyst for improving confidence?

It was evident that the production of the ready-made, user-friendly resources generated both negative and positive effects on the teachers. The use of pre-packaged resources initially led to increased levels of confidence and professional

growth for teachers. Observing and co-teaching the activities detailed in the resource folder and presented throughout the PL programme appeared to give the teachers a better understanding of the content, which in turn allowed them to feel more confident in delivering the lessons on their own. In much the same way as the SPARK-PE Model (McKenzie et al., 1997) of PL was enacted, the resources provided in this initiative gave the teachers a 'PE curriculum' to follow. The data collected has shown that providing the teachers with a series of pre-planned lessons was an advantageous position to start, corroborating the work of McKenzie et al. (1997).

Before the PL programme, Judy (Beach School) identified that the amount of time teachers spent planning PE lessons was an issue due to their perceived lack of confidence. The evidence showed that the PL resulted in an increased number of PE lessons offered in each of the schools, occurring on a more regular basis. Rachel (Ocean School) claimed she had not missed a PE lesson since finishing the PL programme. Also from informal discussions with participant teachers in 2015 (one year after the conclusion of the PL programme), the number of PE lessons delivered was still above the level from before the PL programme. These results are aligned with Sallis et al. (1997) and Petrie (2012) demonstrating that pre-packaged resources can enhance teacher confidence and increase the number of lessons being delivered.

Many of the teachers, however, became over-reliant on the resources as time progressed. The findings have shown teachers were satisfied with copying the resource cards as they were 'user-friendly' and easy to follow. Donna (Beach School) stated, "... it is really good, I can just pick the folder up, and there's my lesson" (Group Interview). As a result of using the resources, it was apparent that teachers valued the time saved in preparing PE lessons, and this appeared to be a pragmatic response by teachers as they juggled the demands of high workload issues and having to teach across all the curriculum areas (Petrie, 2012).

The evidence from this study confirmed the work of Harris, Cale, and Musson (2011b) and Petrie (2012) who found teachers relied on the resources for planning and structuring the lessons with little, if any, adaptation. The extra time generated

from not planning PE lessons, allowed them to spend more time planning the other subjects; as they saw the planning and preparation for PE as already being completed. It was clear that the teachers believed the resources allowed them to deliver PE lessons, which are statutory in Aotearoa New Zealand schools and as a result considered they were fulfilling their teaching obligations around the Health and Physical Education (HPE) curriculum (Ministry of Education, 2007a).

Due to the majority of the teachers not planning their PE lessons and rationalising their decisions as to what would be taught, the pre-packaged resources while supporting teachers growing confidence, at the same time appeared to de-professionalise or disempower the teachers. The de-professionalising and disempowering of the teachers manifested itself through the removal of their autonomy as curriculum decision makers. The teachers were not considering what activities best suited the needs of their students or what learning outcomes they wanted from the lesson. As the facilitator, I made the decisions on what was taught and how it was taught, not the teachers.

The resource folder became both the start point and the end point for the teachers; in much the same way as the games played in the *Physical Activity Initiative* (PAI) (Petrie & McGee, 2012) became dominant features of PE programmes. The lesson observations confirmed the situation that for many teachers, this had become a reality, even though this was not the intention of the facilitator. This unintentional outcome was similarly found in the work of both Apple and Jungck (1990) and Petrie (2012).

The teachers were not required to understand the resources in relation to the rationale, the sequencing of the sessions, or how to use the resources flexibly. No time was allocated in the *PE Partnership Programme* to work with the teachers to gain an understanding of these factors. Teachers need to have time and opportunities to work with the facilitator with the purpose of reskilling and empowering the teachers to become more capable, competent and to be able to plan for themselves. This finding is in line with the work of Petrie (2012). Future developments of this programme would have to include extra time to assist in avoiding this unintentional outcome seen in previous studies.

A consequence of PL programmes that provide standardised lesson-by-lesson resources is the emergence of a culture where the pre-packaged resources are viewed as a quick fix solution for the delivery of more regular PE lessons in schools with no planning or preparation needed. If so, then a possible inference by people other than the PE community could be that it does not have to be a qualified (professional) teacher who is responsible for delivering PE lessons. If this judgement is deemed worthwhile by members of school leadership teams, then the context in which PE is taught could change to adults other than teachers (AOTT) having the responsibility for the delivery of PE within primary schools.

The use of AOTT is already an issue within the UK (Lavin et al., 2008) and in Australia (Morgan & Hansen, 2007) and it is already common in Aotearoa New Zealand (Dyson et al., 2016; Penney et al., 2013; Petrie, Penney, et al., 2014) for external providers to offer sports sessions within schools, with many schools taking up these approaches. The sports sessions provided by the AOTT are modules of sports delivered in curriculum time, but the majority do not have any links to the NZC (Ministry of Education, 2007a). They are often taster sessions in an attempt to encourage more students to play the sport by joining the local teams/clubs. Aotearoa New Zealand research (Dyson et al., 2016; Penney et al., 2013; Petrie, 2011; Petrie, Penney, et al., 2014) has already indicated that there are more than six hundred external providers (including AOTT) acting as deliverers of PE within Aotearoa New Zealand primary schools. Of concern is that sports sessions delivered by the external providers will replace PE within the curriculum and this could become normal within Aotearoa New Zealand primary schools. Further discussion concerning this issue will take place in the final section of this chapter.

While the PL programme examined in this research has highlighted the benefits of pre-packaged resources as a catalyst to enhance teacher confidence it has equally demonstrated that such an approach must ensure that teachers do not just copy the resources verbatim. To avoid this situation, teachers are required to manipulate and adapt the resources to produce maximum benefit for the teachers and the students. Adaptation is advocated for by Ball and Cohen (1996) who suggested curriculum material developers can only predict what knowledge the students will bring into the lessons. An assumption was made by me, as the facilitator, that the teachers,

having seen the activities demonstrated and used within the lessons, would adapt and refine the programmes to suit their students better each year. Regrettably, the intention for the resources was in contrast to the actual reality of their use.

What is not clear from the findings is whether the lack of ability to alter the resources is connected to the level of Physical Education-Content Knowledge (PE-CK) and Pedagogical Content Knowledge (PCK) of the participants. The primary school teachers in this study displayed limited content knowledge concerning PE, consistent with work by other researchers (DeCorby et al., 2005; Gordon et al., 2016; Whipp et al., 2011). From the lesson observations and anecdotal evidence, I propose that teachers who copied the programme of study showed only a slight improvement in PE-CK and PCK. However, others who demonstrated a more marked improvement in both PE-CK and PCK used this new knowledge to adapt the activities to suit their students. There is insufficient evidence to either confirm or refute this claim; therefore, further investigation is required to establish if there is a connection.

To develop PE-CK, primary teachers need to be exposed to specific PE resources as they are a source of increasing a teacher's knowledge base (Shulman, 1987). It is clear from the data that explicit instruction is required for teachers to be able to use the resources flexibly and reflectively to meet the needs of their students. Specific instruction is needed to ensure teachers fully understand the underlying rationales, the reasoning behind the use of specific concepts and the sequencing of the lessons/activities (Ball & Feiman-Nemser, 1988). Time for specific instruction must be incorporated into PL programmes if teachers are to fully understand these concepts and they will be more likely to use the resources as they were intended.

### Modelling and co-teaching

Evidence from the study illustrated that the participants appreciated observing good practice in PE teaching and the opportunity to co-teach with the facilitator as this assisted with building their confidence. The use of modelling and co-teaching is essential to support teachers to change their practice of teaching PE. The teachers'

learning was scaffolded through the utilisation of these two methods of delivery, along with multiple opportunities to learn throughout the programme.

### *The modelling of lessons*

Many participants reported that they lacked confidence in a setting when there were no boundaries, in contrast to a classroom. Consequently, a key concern among the teachers in this study was the management and organisation of students in an outdoor environment. A teacher provided an example of this common apprehension in Term One of the second year (2012). Debbie (Ocean School) a provisionally registered teacher (she had only been teaching for one year), approached me and made the following comment after observing a lesson I took with her class:

*You don't have any behaviour management problems, do you? But I have realised why, if the lesson is organised properly and the students are engaged and happy in what they are doing it's really easy to spot the kids who are not doing what they are supposed to be doing. Then with those kids, you can just pull them to one side, talk to them and then it's ok. That's what I do in the classroom! (Field Notes-27<sup>th</sup> February 2012).*

The conversation that followed provided Debbie with the realisation that she had organisational and behaviour management strategies in place in the classroom. It helped her recognise that PE should not be any different as the only variation is the environment in which the lesson takes place. The modelling of the lessons to include efficient and straightforward organisational strategies to group students into teams was essential to alleviating these concerns for many of the teachers. Initially, the modelling of these strategies was more important to teachers than the PE content of the PL programme.

The teachers described feeling more confident once they made the connection to how to implement their classroom-based management strategies into a PE-context (Group Interviews). The increase in confidence signalled a change in attitude for many and resulted in more involvement in the lessons. It was only after transforming the teachers' apprehensions that they became concerned about understanding the PE content delivered through the programme.

The modelling of the PE lessons was essential as it provided practical experiences that the teachers could see in action. Additionally, the PE lessons modelled were contextualised to the teachers' schools and took into account the limitations of facilities and equipment that challenged the teachers. Many of the teachers commented positively on how much they appreciated seeing the activities in action and how the lessons progressed from one to another (Group Interviews). These remarks are consistent with the research of Coulter and Woods (2012) who also found that teachers joined in the activities to learn the rules, skills and strategies. The facilitator modelling the lessons allowed the teachers to observe and then to reflect upon their practice in relation to the observations before adopting the new knowledge into their teaching (Darling-Hammond & McLaughlin, 1995). After observing the modelled lessons, the teachers moved into the next significant aspect of the PL programme, the co-teaching with the facilitator.

#### *Co-teaching lessons with teachers*

The findings of this study reinforced the work of Rytivaara and Kershner (2012) that co-teaching provided a supportive environment in which teachers could try their new learning knowing that if they made a mistake, the 'knowledgeable expert' was there to help. Teachers reported that they did not feel confident to co-teach until the relationship with me as facilitator was at a point that they felt at ease to place themselves in a vulnerable position (Field Notes and Group Interviews). It appeared, however, that teachers were aware of the benefits of co-teaching but reluctant to move from the 'master' to the 'apprentice' until the relationship was at a level in which they were comfortable. Teachers also indicated that in some instances they were content to stand and watch due to lacking confidence and sometimes an unwillingness to become involved. The evidence revealed that when the teachers became involved in the co-teaching, their confidence developed further. Tara (Beach School) in her individual interview spoke about her regrets of continuing to observe and not becoming involved quicker; in hindsight, she felt she had stood on the side-lines for too long, as her learning increased once she was more involved in the lesson.

Acknowledging the balance between the teachers' lack of confidence, personalised learning and encouraging teachers to take the step to co-teaching is crucial. If the

programme is to be personalised, all choices need to be made by the participants, but some may choose not to engage in the co-teaching process. To assist this process, the facilitator must be able to know when to encourage the teacher to take the plunge and become involved in the co-teaching and when to hold back a while longer. To achieve this, the facilitator is required to have an understanding of the participant personality and have developed a relationship that will allow this to occur. Further discussion surrounding developing relationships will occur in the following section.

The evidence from this study supported previous research that advocated for the use of modelling and co-teaching in PL. The work of Darling-Hammond and McLaughlin (1995) aimed to provide policy-makers with some guidelines for designing PL. These guidelines included providing support through modelling and coaching over a sustained, on-going period. Additionally, Hill et al. (2001) in Aotearoa New Zealand analysed the results from 12 schools involved in a Ministry of Education contract that concerned the rethinking of PL practices and found that modelling and the sharing of good practice was essential. The implementation of both modelling and co-teaching required an extensive period to be spent within the schools, with the teachers needing to develop the trusting relationships that are a prerequisite if these two methods of delivery are to be successful. Also, a continuous phase allowed the teachers to experience multiple opportunities for learning. Despite the issues discussed above, the use of modelling and co-teaching over a sustained period has been affirmed in this study. There is a need to pay attention to the issues discussed as these are significant for the future planning of PL programmes.

### Teaching Games for Understanding

Through the use of the pedagogical model TGfU, the lessons delivered by the majority of the teachers were more structured and included to a greater extent the use of questioning, feedback and feed-forward than previously. It was clear from the data collected that using the TGfU model was seen by the teachers to be beneficial and appreciated. Even though the teachers valued the use of TGfU due to the student-centred approach of the model, it was evident through the

observations it was not being used to its full potential. The findings indicated that teachers used the TGfU framework primarily as an organisational tool and not as a pedagogical model.

### *Management of students*

Despite the teachers from both schools not using TGfU to its full potential, but predominantly as an organisational strategy, there were still positive impacts. When teachers began delivering PE independently, the lessons were better organised, and students were more engaged due to the lessons having a sounder structure (Lesson Observations). It appeared that TGfU provided the teachers with a process to follow, to construct and organise their PE lessons. The intention was not to provide the teachers with an organisational strategy to use within their PE lessons; however, this became a reality for many, resulting in great success. The teachers were accustomed to using student-centred strategies, so the TGfU model complemented what they were utilising within the classroom environment, and not the traditional teacher-centred method described by Hoffman (1971) of warm-up, demonstration, explanation and practice (DEP) method that many considered previously to be the way to teach PE.

As revealed by the field notes, the teachers had now developed their confidence, their organisational skills and had a pedagogical model to follow when teaching PE; but, some had developed the ‘busy, happy, good’ (Placek, 1983) mentality. Teachers perceived success in lessons when their students were actively participating (busy) in the lesson; they were enjoying the lesson (happy), and they were doing what the teacher told them to do (good). Denise (Ocean School) reinforced this finding by commenting in the group interview “I like this, the students are all engaged in the activities, they are enjoying themselves much more than before, and I have fewer discipline issues in the lessons now”. The lesson observations and the interviews conducted corroborated this belief of some of the teachers.

Due to teachers having fewer worries regarding the management of students, it would, therefore, be reasonable to assume that teachers could concentrate more on the content of the lesson. However, from the evidence collected, this appeared not

to be the case. Teachers were replicating the resource cards as previously discussed. As the PL provider, it was satisfying to see that the lessons observed were more organised and structured allowing for more students to be involved throughout the lesson and also to observe the teachers with increased confidence and feeling that they were delivering 'good' lessons. It was disturbing that despite the significant amount of time spent with the teachers these concerns surrounding the use of TGfU occurred.

#### *Questioning, feedback and feed-forward*

For many teachers, their questioning skills and their use of feedback and feed-forward were still limited due to their lack of PE-CK (Field Notes-Term One 2014). Questioning is an integral part of TGfU (Forrest et al., 2006), and without this skill, it is exceptionally challenging to encourage students to become involved in the critical thinking and problem-solving required for this approach (Pearson & Webb, 2008). Similarly, the use of feedback and feed-forward is seen to be a criterion that contributes to being an effective teacher (Rink & Hall, 2008; Timperley & Alton-Lee, 2008).

The participants when observed teaching in the classroom posed quality questions and presented valuable feedback and feed-forward regularly to students across the different curriculum areas. Through the use of modelling and the co-teaching strategy, techniques were demonstrated on how to pause the PE lesson at an appropriate time to allow for the opportunity to question the students or to provide appropriate feedback/feed-forward to enhance their learning. Tara of Beach School commented in her interview that asking questions and providing the feedback and feed-forward within the classroom lesson had "become engrained in them and now they were transferring this to PE". She also made a comment that in PE when they had only two teams, and many students sat down waiting, this was not conducive to students to be able to talk to each other or the teacher in a productive manner. However, now the students are all involved it is easier to stop one of the games and have a discussion with those students while the others carry on playing (Individual Interview).

As a consequence of the structural change to the lessons, all the participants significantly increased the number of questions they asked and the amount of feedback/feed-forward provided to the students on how they could improve their skills or consider what strategies they may employ in the next part of the lesson (Lesson Observations). The teachers appeared more confident and happy to question students, and provide feedback and feed-forward within PE lessons post the PL. However, the data highlighted that the quality of the questions was mostly not appropriate to enhance critical thinking and to problem-solve in the majority of the lessons. Questions are required to be at a deeper level to allow the students to gain a better understanding of the skills or strategies they are attempting to learn. The evidence from this research showed that the majority of the questions asked were predominantly closed or of the recall type (Siedentop & Tannehill, 2000). The teachers were observed asking closed questions which have set answers, or recall questions that ask the students to recount from their memory what they have participated in during the lessons or what the teacher has told them. If the students are to develop their problem-solving and critical thinking skills in PE lessons, they need to be provided with questions that are open-ended, guided or of the convergent or divergent type. These types of questions require reasoning and problem-solving and typically have a range of both correct and incorrect answers.

In addition, the lesson observations found that the quality of the feedback and feed-forward was not at a level for students to improve their performance or understanding of the activity. When providing feedback, the teachers were able to see what had happened in the lesson, or during the execution of the skill, so they could pinpoint the features that were wrong. The feed-forward, nevertheless, was very limited and in some cases did not occur due to the lack of subject knowledge. The teachers did not have the knowledge needed to correct the problems in the techniques or strategies.

To pose questions that required students to reason and problem-solve or provide effective feedback and feed-forward to enhance student learning, the teachers require a substantial amount of subject-specific content knowledge. This notion is supported by Pearson and Webb (2008) who stated that “practitioners must have deep knowledge and understanding of concepts and ideas for players to be

challenged and be engaged in critical thinking and problem-solving” (p. 7). The findings from this research were consistent with the international literature on questioning and content knowledge (CK) within TGfU (Forrest et al., 2006; Griffin & Sheehy, 2004; Pearson & Webb, 2008; Siedentop & Tannehill, 2000; Ward & Griggs, 2011). These authors recognised that the TGfU model required a considerable amount of in-depth subject knowledge around the skills and tactical understanding of the games.

The data from the field notes and interviews indicated that the participants had increased their PE-CK and PCK, but only marginally, despite the sustained period of the PL programme. Many of the teachers involved struggled to put into action the TGfU model in any other way than as an organisational model, due to their lack of knowledge. All of the participants tried to use the model, as they recognised the benefits of using small-sided games and the importance of being able to question students on what they were learning. Additionally, they wanted to provide feedback and feed-forward to enhance learning, just as they do in the classroom; however, the deficiency in PE-CK inhibited this process.

Many generalist primary teachers are excluded from using this pedagogical model fully or successfully due to lacking the necessary PE-CK. If the TGfU pedagogical model is to be used successfully in primary schools, there is a need to develop an in-depth knowledge and understanding of the concepts and ideas of TGfU and CK; this is a must for teachers. To increase the teachers’ PE-CK, more information must be provided concerning the activities/sports that are involved in the PL programme.

Despite teachers having low levels of confidence and a reluctance to teach PE at the beginning of the *PE Partnership Programme*, it was apparent they made significant attitudinal changes towards the status and value of PE on the completion of the programme. Many of the teachers remarked in the interviews that due to their confidence developing, they were now taking their classes outside for the PE lessons, and they had begun to appreciate the importance of PE. Teachers at both schools referred to the connections they were making between PE and the key

competencies<sup>19</sup> of the New Zealand Curriculum (NZC). More explicit connections and illustrations for ‘relating to others’ and ‘participating and contributing’ in the context of PE were identified, which were then able to be used and transferred from the PE lessons to the classroom to enable students to have a better understanding of these key competencies. The teachers believed that this would have a greater impact over time on the students’ behaviour in the classroom, especially on some of the more challenging students in their classes (Group Interviews).

For many teachers at the conclusion of the programme, PE had become a lesson that was automatically taught each week, and one which they appeared to enjoy teaching. Similarly, the senior leadership teams (SLT) of both schools observed an attitudinal change towards PE. Holly (Beach School) commented about teachers being enthusiastic, and they discussed the activities and items that had been completed in the PL in their syndicate meetings and that everyone was on board, something she had not observed before the PL. Furthermore, Lindsey (Ocean School) felt there was a significant change in the teachers, identifying that they appeared a lot happier, as PE was no longer such a foreign object, but was known to them.

It is, however, important to acknowledge that TGfU does not reflect PE as it is articulated in the NZC. TGfU is a curriculum model that is utilised by teachers to deliver aspects of PE curriculum. As discussed the teachers have achieved noteworthy modifications to their practice of teaching, however, currently are not delivering PE in the sense of the NZC. As stated in Chapter Two, what constitutes high-quality PE lessons is a complex process with many facets and interpretations. For teachers in this study to deliver high-quality PE lessons a considerable amount of further PL would be required to embrace all the components of NZC PE.

### **Building positive relationships**

Positive, trusting relationships between the facilitator and the participants is fundamental if a PL programme is to be effective. The relationships built between

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<sup>19</sup> The *New Zealand Curriculum* Key Competencies are ‘the capabilities people have and need to develop, to live and learn today and in the future’. The NZC identifies five key competencies: thinking, relating to others, using language, symbols and texts, managing self, and participating and contributing Ministry of Education. (2007a). *The New Zealand Curriculum*. Wellington, New Zealand: Learning Media Limited..

the generalist teachers and me appeared to be a key contributing factor to changing practices. The work of Pellett and Pellett (2009) observed that without the establishment of trust through building relationships between those concerned, change in teaching practice will not eventuate. If these relationships are not built, teachers do not feel confident to put themselves in situations where they are prepared to take risks and feel vulnerable in doing so. For teachers to change their teaching practice in a learning area that they do not feel confident delivering, they needed to be assured that their efforts would not be disparaged but supported by the PL provider. Four factors have been revealed through the data that contributed to the building of successful relationships (i) facilitators 'walking the walk', as well as, 'talking the talk', (ii) taking the time to build relationships; (iii) respect for different knowledges and drawing on our shared expertise, and (iv) managing the complexity of relationships. Each of these situations is discussed in the following sections to emphasise their significance.

#### Facilitators 'walking the walk', as well as 'talking the talk'

The generalist teachers needed to know that as the facilitator I could enact the theory in the realities of the practical setting before there was a willingness to develop a relationship with me. The importance of the facilitator having the ability to talk about the theory, and then demonstrate through teaching the activities to the teacher's classes, using the equipment available in their school was stressed as critical by the participants (Group Interviews). The capability of 'walking the walk' as well as 'talking the talk', positioned me as a credible facilitator.

The data gathered in this study supported the findings of Harris et al. (2011b); O'Sullivan and Deglau (2006) who argued that if PL is to be effective, teachers need to see the initiative working in their environment, to start the process of teacher change. It was revealed in the group interviews that once the teachers appreciated the fact that the 'knowledgeable expert' could 'walk the walk', they became more willing to invest in developing a relationship between themselves and the facilitator.

The teachers indicated that this knowledge was crucial before they were prepared to invest time into building a relationship. Joanne (Beach School) expressed this sentiment in the following comment:

*The specialist needs to be able to walk the walk, teach a whole lesson, like our class, you know not just say this is how it's done or do the PowerPoint, and say do this, this and this. They need to be able to cope with our class you know, our age group and take a PE lesson like you, so you completely went up the ranks with me because you taught my class (Group Interview).*

It appeared that this sentiment was generated given the teachers' previous experience of PL, where they had been 'talked at' by the facilitator and provided with theoretical concepts abstracted from the actualities of their classroom. Furthermore, some of the teachers found on occasions the model/theory was too difficult to implement in their schools or classrooms on returning, so they had abandoned the ideas (Group Interviews).

#### Becoming a member of the school community takes time!

The data from this study have highlighted that positive relationships cannot be achieved without a considerable investment in time from both the facilitator and the participants. It appeared that the teachers took into consideration two factors when deciding whether to foster a relationship, the reputation of the facilitator and the duration of the PL programme. Participants articulated in the group interviews that in the first instance what was deemed essential for the 'knowledgeable expert', was a practitioner who could effectively demonstrate the content. Once this information was verified, the teachers considered that the relationship was worthwhile developing and, therefore, were willing to commit the time necessary to develop a working relationship.

Secondly, the length of the PL appeared to have implications for the teachers surrounding the building of relationships. In the group interviews it was revealed by the teachers that for a one-off, one-day course, the forming of relationships was not so important as receiving information as they would not encounter the facilitator again. However, for a PL programme such as, the one central to this study, that was weekly and continued over the year, the teachers needed to feel self-assured and

this is only able to be achieved over time. Despite the teachers possessing this knowledge, it took time to build the relationships; they were not established instantly. The length of time needed to establish a trusting association was dependent upon each participant. According to the teacher's interviews, the time frame for a facilitator to develop the rapport with the participants is between one and two terms (10 to 20 weeks).

In addition to time, continuity and consistency (working with the same teacher) were required. These factors assisted both the teachers and the facilitator to develop the relationships. In year one of the study, I found it easier to develop a relationship with the year 3 and 4 teachers at Ocean School, as I was involved with the same teachers each week throughout the year. However, at Beach School, it proved more difficult due to the teachers changing frequently, which had a significant and negative impact on the opportunity to build trusting relationships, as there was little continuity from week to week (Field Notes-Term Four 2011).

The work of Guskey (1985) and Pellett and Pellett (2009) expressed that for the new practice to be successful trust is needed while the change is taking place, as change involves risk taking. This statement was affirmed by Tara (Beach School) who during her syndicate group interview expressed the importance of positive relationships. She referred to having to be comfortable with the facilitator so that you are confident when delivering the lessons.

All teachers in Aotearoa New Zealand are encouraged through the effective pedagogy section of the NZC to know their learners and create a supportive learning environment. The relationships built between both parties allowed for the facilitator to know the learners (in this case the teachers). The facilitator, via this knowledge, had an obligation to ensure the PL programme met the individual's distinct needs, as each teacher involved was different. Ensuring each teacher gained the most out of the PL gave rise to challenges, although the process of adjusting the programme was less problematic as open discussions could take place due to the rapport that existed.

Immersion in the school culture was crucial as this provided additional integrity for me as the facilitator. It was important that I was accepted as part of the school and not regarded as a visitor by both the teachers and the students. In line with the work of Walsh (2002) and Pellett and Pellett (2009), the findings of this study demonstrated the importance of becoming part of the school culture. This approach required that I spend time in the staff room at interval and lunchtime before and after lessons, talking with the teachers and staff on both a personal and a professional level. Such an approach added to the establishment of more genuine relationships (Jones & Maloy, 1988), and a shared understanding of the school context which could only be achieved through spending time within the organisation. Becoming a member of the school community has been shown through the data to take considerable time. However, this is vital if respect is to be generated between all the parties involved in the PL programme. Additionally, from the establishment of respect, the practice of shared learning can be achieved.

#### Shared expertise and respect for different knowledges

Both the facilitator and the participants must be viewed as 'knowledgeable experts' within the PL programme. The primary teachers gained knowledge about PE; I learnt strategies and techniques to use with the younger students from the participants, through the co-teaching and lesson observations. These approaches included behaviour management strategies, but more importantly the realisation that it was necessary for me to simplify my instructions, slow down the pace at which I talked and break the information into smaller amounts (Field Notes).

An example that highlighted my learning was early in the first year of the programme when I was working with a year 3 and 4 teacher at Beach School (Field Notes-1<sup>st</sup> March 2011). I spent a few minutes explaining an activity to the class and asked if the students had any questions, no hands went up, so I assumed that they understood and sent them off to begin the activity. After a few minutes, I realised there was a problem, and the games were not being played as I intended. From the resulting conversation with the teacher I became aware that the students in her class were encouraged not to put their hands up, but, to make a thumbs up signal with their hands on their knees if they had anything to say. So some students did have

questions, but I had not recognised the sign. The result was to call the students back into the group and go through the instructions again. This was a strategy I learnt and found myself frequently using throughout the programme.

This finding has important implications for the ‘knowledgeable expert’ as it provided an example of how important it is for the expert to learn from the other teachers and that reciprocity is a significant component of effective relationships. The acceptance of shared learning during the programme was key, everyone involved was a ‘knowledgeable expert’ and, therefore, this was not a top-down model of PL, where the expert provided all the knowledge but a more linear approach.

#### When relationships become complex

Relationships can become complex when it is transformed from a professional relationship into a friendship, as a consequence of spending a significant amount of time with one or two teachers (Field Notes-Term Four 2013). As the facilitator, I was conscious of the necessity to maintain a professional relationship in the lessons as I had a role to uphold.

The teachers reported the relationship with myself as a positive one, which is how I perceived it (Field Notes and Group Interviews). Although this was crucial for the PL programme to be successful, I had reservations concerning the data collection. Due to the nature of the relationships, which in some cases had progressed to friendships, it could be argued that the participants did not feel comfortable conveying negative comments during the interviews. Additionally, the teachers knew the purpose of the interview and may have supplied positive comments thinking that was the desire for the research.

Reflexivity when conducting research is essential as the researcher is required to be mindful of the methods used and the purpose for why they are carrying out the research and to recognise at what point, if any, their beliefs and opinions about the research area might have influenced data collection or analysis. Remaining reflexive while maintaining the relationship with the participant is central to

working effectively as a facilitator of PL. It was challenging to be reflexive and not to allow personal beliefs and values to affect my attitude and engagement with the participants. There was a fine line between balancing personal perspectives with the need to establish and sustain positive relationships.

### **Guidelines for an inexperienced facilitator: responsibilities and attributes**

The following four sections discuss aspects that the data has revealed to be significant concerning the responsibilities required by the facilitator, to ensure the PL is effective. These responsibilities include (i) fully understanding the primary school context, (ii) planning ways to ensure the sustainability of the programme once the facilitator leaves the school; (iii) opportunities to provide teachers with feedback and feed-forward and (iv) resisting the urge to judge and showing enthusiasm for the content. In some ways, the four facets could be regarded as part of a checklist that is required by a facilitator when preparing and presenting a PL programme. I accept that these four aspects do not create a complete list, however; these have been found to be significant from this research and from my learning and shortcomings to become an effective facilitator.

#### Fully understanding the primary school context

It is essential for the facilitator to understand the context in which they are delivering PL. The findings from this study have identified that the facilitator's ability to recognise and appreciate the conditions and pressures impacting on teachers in Aotearoa New Zealand primary schools is imperative. These issues from the broader context of the school had a bearing on the PL programme and influenced the teachers considerably. This finding reinforced the view of Patton et al. (2012) and Petrie and Lisahunter (2011) that comprehending the teachers' context including school culture, working conditions and perceived support are critical factors for PL facilitators.

It was apparent from the data that there are three significant elements concerned with understanding the context. This section will discuss each of these matters; firstly, the use of policy borrowing from other countries to devise PL programmes that are implemented in Aotearoa New Zealand. Secondly is the status of PE in

primary schools, as it is considered a low priority subject area. Therefore, the implications on the PL for teachers are considerable; these are related to the crowded curriculum in which teachers are working. The third factor is the use of external providers within the schools to deliver PE lessons. External providers delivering aspects of PE within lessons and sports sessions is becoming an ever-increasing reality within primary schools.

*Do not just borrow policy from somewhere else!*

Borrowing a programme or a best practice from another country is not always the best policy. As a novice PL facilitator, I used my prior knowledge and experience of PL to devise the programme featured in this research. I based the programme on the assumption that best practices could be transferred across national contexts (Chakroun, 2010) by designing the PL on what I had previously delivered in England as part of the *School Sport Partnership Programme*. Auld and Morris (2014) referred to the fact that educational policies were increasingly being borrowed and copied from education systems that are regarded as successful, with the expectation of gaining the equivalent performance and outcomes as seen in the original country.

When planning and developing the PL programme, I had not appreciated the importance of an individual school's context. It was apparent that context and cultural conditions are critical aspects of policies and strategies (Field Notes-Term One 2014). Researchers in this field recognised that the transfer of policies from one country to another is very challenging (for example for example Steiner-Khamsi, 2016). However, while the policies and strategies can be replicated, the exact cultural and contextual conditions of where it was successful cannot be copied (Harris et al., 2016; Phillips & Ochs, 2003); therefore, the transfer becomes problematic. Reid (2011) argued that the differences in each country's culture and context required the ideas and policies to be treated with caution and to be trialled before they are applied in the new setting.

The significance of context has indicated that PL facilitators in Aotearoa New Zealand cannot borrow best practices and policies from other countries and expect them to be successful. The ideas are required to be adapted to respect the cultural

and contextual differences of the contrasting countries. Additionally, it can be argued that these conditions are considered from school to school, as each school has differing contexts, for example, the socio-economic background, the predominant ethnicities and the size of the school. The claim in the literature (Penney et al., 2013; Petrie & McGee, 2012) that the previously discussed ‘one-size fits all’ approach to PL is not appropriate in Aotearoa New Zealand is supported by the findings in this research.

Future PL designed by either government agencies, private organisations or individual facilitators should be obliged to take the context into account to ensure teachers receive suitable PL for the setting they are teaching in. When planning PE-PL, it is also necessary for facilitators to consider the following two contexts concerning PE within primary schools.

#### *The status of PE and the crowded curriculum in primary schools*

Facilitators who deliver PE-PL are required to understand that PE is not a high-stakes subject in the majority of primary schools and teachers are dealing with the demand of literacy and numeracy being priority subjects. Research conducted in Aotearoa New Zealand (Dyson et al., 2011; Penney et al., 2013; Petrie, 2016b) and the international research of Dollman, Boshoff, and Dodd (2006) and Sahlberg (2006) supported this claim which was detailed in the Literature Review (Chapter Two). The low status of PE in both Beach and Ocean School was evident, and teachers referred to the situation before the PL programme started. Although the data collected in this study supported the previous research, these reasons cannot be seen as excuses raised by the teachers to avoid teaching PE, but as the reality that the teachers are working under in Aotearoa New Zealand primary schools.

According to the findings as discovered through the field notes and interviews, two factors have appeared to contribute to the low status within the schools. The first is the lack of confidence of the participating teachers and the second is the pressure applied to teachers regarding the importance of literacy and numeracy. The reluctance to teach PE through the lack of confidence in generalist primary teachers is well documented in both national and international literature (for example for

example Gordon et al., 2016; Jess et al., 2014; Morgan & Bourke, 2008; Penney et al., 2013; Petrie, 2010a; Sloan, 2010).

Earlier in this chapter, the discussion focused on how teachers' confidence had developed through the use of resources, the use of modelling and co-teaching lessons and the use of the pedagogical model TGfU. However, one unanticipated finding associated with the lack of confidence and one that perpetuates PE as a low status subject, was that a few teachers threatened their whole class that there would be no PE lesson if they did not complete their work, or if they did not improve their behaviour during a classroom lesson. This finding was observed at the beginning of the programme as evidenced in the field notes and was also referred to by Mary (Beach School) and others in the interviews. The situation of using the withdrawal of PE as a punishment raised the question as to whether this strategy was an attempt to manage poor behaviour or whether it was an avoidance strategy for the teacher, an excuse not to teach PE. I believe for some teachers it was used in the latter context as a way of avoiding teaching PE due to their lack of confidence. The vast majority of students in both Beach and Ocean Schools enjoyed their PE/Sports<sup>20</sup> lessons and looked forward to this lesson in the week, so it would appear that this was more about the teachers' 'interests and safeties' rather than the learning needs or desire of the students. I witnessed students very disappointed that they would not be able to take part in PE when the teacher brandished this threat.

Additionally, the use of withdrawing PE as a punishment speaks to the status placed on PE by the teacher. If the teacher valued PE as a curriculum subject, comparable to the other subjects, it would not be so easily omitted from the class programme. These teachers did not use numeracy, literacy or any other learning area in the same vain. Maybe PE is used as leverage for good behaviour or completion of work because the teachers know the students like this subject/activity, and therefore will comply with the requests to be able to go out and 'play'. One of the SLT at Ocean School acknowledged the observation by commenting that she did not endorse this type of punishment as she valued PE and wanted the students to participate in PE

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<sup>20</sup> The terms PE and Sport are often used to mean the same. Some schools referred to it as PE, some as Sport, depending on the school and the teachers concerned.

lessons. She also pointed out that PE should be taught and not opted out of, as it was a curriculum subject (Individual Interview).

In Aotearoa New Zealand primary schools the importance of literacy and numeracy is increasing which is impacting on the other curriculum areas. While the Ministry of Education continues to drive the importance of literacy and numeracy in an attempt to raise student achievement in *National Standards* and the internationally recognised tests (such as PIRLS, PISA and TIMSS<sup>21</sup>) the situation will not change. These pressures appear to be impacting on PE within the primary schools as the field notes and interviews confirmed. If another activity compromised the daily literacy and numeracy programme, for example, an assembly, a class visit or a visiting speaker/theatre group, and they were due to do PE in the afternoon it would be foregone to catch up the literacy or numeracy lessons. Mary (Beach School) supported this by providing an example of when the Duffy Theatre group had performed to the students in the morning, so the programme was altered in the afternoon (Group Interview). Laura (Ocean School) also commented that although she saw that PE was relevant to the students, and it was part of the NZC, it was not as important compared to literacy and numeracy (Group Interview). All the participants of the PL programme felt that due to the external pressure placed on them by *National Standards*, that priority and the most significant amount of time of the day had to be given to these two subjects (Group Interviews).

As facilitators of PL, and PE professionals, it is our responsibility to gain an understanding of each school where PL is delivered. Each school is unique, with each school affording different levels of status and importance to PE. PL facilitators must also appreciate the impact the crowded curriculum had on teachers. The data from the interviews has revealed that if consideration is assigned to these factors, then positive relationships can be formed, which impacts on teacher confidence and ultimately the raising of the status and importance of PE within the school.

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<sup>21</sup> PIRLS-Progress in International Reading Literacy Study, PISA-Programme for International Student Assessment, TIMSS-Trends in International Mathematics and Science Study

### *The use of external providers within primary schools*

The use of external providers to deliver aspects of PE and sport is common in Aotearoa New Zealand primary schools (Dyson et al., 2016; Penney et al., 2013; Petrie, Penney, et al., 2014; Powell, 2015). External providers tend not to be teachers; they are coaches often with little or no curriculum or pedagogical knowledge. As a facilitator of PL, it is important to understand the context that has enabled external providers to be associated with primary schools with such prevalence and how they are utilised by each school. The launch of a state-funded initiative, *KiwiSport*, has opened the way for *KiwiSport* funded organisations with their instructors/coaches to dominate the provision of 'PE' and sport in primary schools. Many schools engage the services of the external providers because they are free and often provide complementary equipment for the schools. The work of Dyson et al. (2016) and Penney et al. (2013) found that in Aotearoa New Zealand external providers are the major suppliers of PE and sport in the primary schools.

My experience of external providers in schools is that they are mainly young coaches with introductory level coaching qualifications, providing a taster session for all the students in the school; or, at the school for one session a week for a three to six-week block of time before they move onto another school. A typical procedure for these sessions has been that the teacher accompanies the students to the field or the hall to meet the coach, then from here the teacher then leaves the class in the hands of the coach for the session. Most teachers then return to their classrooms as this is the teacher's allocated classroom release time (CRT) which is used for planning, preparation of lessons or marking of work. Some will remain with their class and watch from the side-line with little or no interaction in the lesson.

Before the PL programme, the participants had been in the habit of expecting the external providers from sports clubs and organisations to come into their lesson and coach their students. As a result, the field notes showed that many of the teachers had the impression that I was there to teach the students but they had not realised I was there to work with them. This perception triggered a few problems in the initial stages, however once the teachers fully understood the intent of the programme the problems were ironed out.

Many external providers advise that they will provide teachers' PL as part of the package when they deliver their sessions to the schools. This claim is appealing to Principals as they are aware of the lack of confidence teachers display and see it as PL provided free of charge by the external providers. A recent report by the National Monitoring Study of Student Achievement (NMSSA) (Ministry of Education, 2014c) claimed that "over two-thirds of teachers have received PL in PE in the last two years. The most frequently cited source of support for classroom teaching was external providers" (p. 8). A large proportion of research (for example for example Griggs, 2010; Hurley, 2016; Petrie, Penney, et al., 2014) described the use of 'specialist' external providers delivering PL for teachers. External providers delivering PL is contentious as the majority of the providers are young, inexperienced coaches with no teaching background; it therefore, becomes questionable what gains the teacher receives from standing at the side of the session and watching.

The evidence presented from this study showed that to gain knowledge and understanding teachers needed to be involved with the PL on many different levels. Therefore, the argument provided by external providers and some SLT advocating for the use of external providers to deliver PE for PL purposes is futile. Despite the limitations that have been highlighted in this study I believe that it should be the teacher, whether a generalist or specialist, who delivers the PE lessons within schools, not an external provider. Even though they may have limited PCK and CK and may be inclined to copy the resources, I consider this to be more suitable than using external providers. Griggs (2010) supported this argument by stating "journalists are not brought in to teach English, and neither are tour guides brought in to teach geography and yet arguably they would have a reasonable grasp of the subjects involved" (p.44). The rationalisation is that PE is an important learning area and the teachers have a greater understanding and knowledge of the students in their class and are, therefore, the most appropriate people to deliver PE lessons (Powell, 2015).

A further question raised by the findings of this study is whether the use of external providers is becoming the norm in primary schools in Aotearoa New Zealand. So many external providers are seeking to enter the education sector, due to the

crowded curriculum and teachers not having the time to plan appropriate PE lessons for their students. If this does become the case, then the status of PE will become further marginalised, and severe consequences to the subject will occur. However, given the issues of using external providers, we as facilitators need to better position the teachers to be more discerning and to become critical consumers about which agencies they allow into the schools and their purpose for being there. Also, the teachers' increased confidence to teach PE may over time lead to a reduction in the number of external providers supplying sessions to the schools.

### Ensuring the programme is sustainable

A process must be initiated to ensure the sustainability of the PL programme once the facilitator has left the school. According to Hargreaves and Fink (2003), sustainable improvement “requires investment in building long-term capacity for improvement, such as the development of teachers’ skills, which will stay with them, long after the project money has gone” (p.694). Timperley (2008) claimed that sustainability depends on two factors, first what happened during the PL experience and second the conditions that are in place at the school once the support is removed. If the PL is to be effective and sustainable, a pre-planned approach to the withdrawal of the external support is required, something that was neglected in this PL programme. On reflection, the requirements of the *KiwiSport* funded project could partly account for this oversight, as a planned withdrawal was not a prerequisite for this initiative. Another explanation was due to my naivety in not realising the importance of an exit strategy, owing to my lack of experience in delivering a prolonged PL programme. This reason coincided with the PL programme being underway when it developed into this research project. As a result, I was unfamiliar with the research associated with PL and the significance of sustainability.

The findings from this study suggested that members of the SLT at both schools had reservations about whether the programme was sustainable once I had left (Individual Interviews) although the SLT's pointed out that they did not see why it should not be sustained providing someone had the accountability to ensure it continued. Holly, a member of the SLT at Beach School, suggested that one of the

leaders in the school would have to take responsibility (Individual Interview). Despite the acknowledgement, no-one in either school had the responsibility of ensuring the sustainability of the programme. Michelle noted on this issue “I think in hindsight having a team who were given the responsibility to make it sustainable and carry it on would have been a good move” (Ocean School, Individual Interview).

Research from the SPARK-PE (McKenzie et al., 1997) project found that programmes that were sustained in schools had support from their Principals (Dowda, Sallis, McKenzie, Rosengard, & Kohl III, 2005). Additionally, ‘maintaining the momentum’ (Best Evidence Synthesis (BES) principle 10) is regarded as crucial for effective PL and is linked to principle 9 - ‘active leadership’ (Timperley, 2008). To ensure that momentum (sustainability) is carried forward the organisational infrastructure needs to be present that supports PL, with support from the SLT. Timperley (2008) claimed that if the PL is school-based, then there is a need to have a designated leader who is actively involved in the PL. She also suggested that teachers find it difficult if there are not leaders based in the organisation, for example, in senior leadership who continuously reinforce the importance of the PL and provide assistance to make sure teacher and student learning goals are achieved. Sarah (Beach School), highlighted the need for maintaining momentum and remarked: “keeping the ball rolling independently without you being there now is going to be a challenge, but we know you have given us enough help” (Group Interview).

The dissemination of information and learning to other teachers is vital to ensure continuity especially to those who join the school after the start of the initiative. An example was found in the findings which referred to a conversation between a syndicate at Ocean School regarding the arrival of a new member of staff (Group Interview). The new member of staff was regarded as having a significant amount of PE teaching experience and had been a teacher in charge of sport for a number of years and was expected to take on this mantle at Ocean School at the end of the year. However, he was struggling to follow and adopt the PE programme; he was used to teaching PE through teacher-led pedagogies. The conversation confirmed that no one at Ocean School had been designated the responsibility to ensure that

new teachers to the school were provided with the information and documents to make sure that their students received a similar PE programme as the rest of the students in the syndicate.

Schools can sustain PL when there are systems and processes in place affecting the extent to which the PL becomes part of the school (Education Review Office, 2009). From being a part of both schools for three years, I know they have systems and practices in place to plan, monitor and evaluate PL, especially for literacy and numeracy. Teachers are given responsibility to oversee the administering and monitoring within their syndicates, but this was not the case for the PE-PL programme. As the PL provider, I was not in a position to dictate what happened in the school once the programme had finished. However, I could influence what happened during the programme. A recommendation would be to instigate a termly meeting with the Principal or a senior leader where updates are provided from the term, and an outline for the upcoming term is presented. As a result, if I am involved in this type of programme in the future, considerable importance needs to be placed on ensuring that the initiative continues with 'someone in charge' who sees the value, receives the feedback and is aware of the future direction of the PL.

#### Providing teachers with opportunities for feedback and feed-forward

Time for discussion before lessons and debriefing after lessons is essential to enhance the learning of teachers and support changes to practice. Time is required to be built into the format of the PL programme as sufficient time is not available within the lessons. As the PL facilitator, I had not comprehended the importance of timetabling discussion time into the programme. I envisioned that feedback would be provided to the teachers throughout the programme, however, as Sarah (Beach School) recognised, the amount of time allocated to feedback was inconsistent between teachers (Group Interview). I had been aware of the inconsistency of time spent talking with the teachers. The cause of the discrepancy was primarily due to the timing of the lesson within the day. The teachers who had a timetabled lesson after a morning tea or lunch break would often speak to me in the staffroom about the lesson, about what they were planning to do that day and were able to clarify any concerns before the lesson. As a consequence of that discussion, the dialogue

that took part in the lesson proved to be more productive in allowing for effective and quality feedback and feed-forward. The other teachers found that there was little opportunity to discuss the lesson as they arrived straight from another lesson, and then the teacher had to rush away at the end, as the class had to get back into the classroom to continue with the rest of the day's programme.

What was clear from the findings of this study was that the issue of providing consistent feedback and feed-forward to the participants was a difficult situation to solve without the scheduling of a dedicated time slot for each teacher. The feedback or debriefing literature appeared to be undecided as to whether a debrief should be immediately after the lesson or delayed at least 24 hours. A theme common to both methods was that debriefing needed to be structured. Also to be effective, the length of the debriefing session needed to be the same as the duration of the lesson observation as a minimum (Pearson & Smith, 1985). To implement debriefing time into the PL programme as it stands at the moment would be problematic. If the debriefing followed the lesson, it would mean that another adult whether teacher or teacher aide/assistant would have to supervise the class for that time (30 to 40 minutes). This situation would prove difficult logistically within a school environment as the students and teacher leave their PE lesson to return to class to continue with another lesson. This situation would have major implications on staffing within the school. The second scenario of the delayed debrief occurring possibly the following day, again the logistics of organising this would be significant. If it happened within the school day, this would result in staffing issues, and if it was to happen after school, this might conflict with existing commitments to afterschool meetings and have repercussions on workload issues for the teachers.

The feedback and feed-forward that occurred in this study were very informal: there was no structure and happened either through a short conversation within the lesson or at the end, as the teacher was leaving. What happened was not effective debriefing, as the teachers had no opportunity to respond to what I said, and in most cases, the conversation concerned the logistics for the next lesson (Field Notes-Term Three 2012). Incorporating time into the programme to provide opportunities for debriefing is important if the teachers are to benefit from the structured reflection and is a matter that needs further investigation if this programme or others

similar are to be delivered in some form in the future. Resolving the issue of how to build in debriefing time would depend on the funding available, the commitment to the programme of the school and the SLT; each school would provide their unique solution.

#### Resisting the urge to judge and showing enthusiasm for the content

Being reflexive while maintaining the relationship with the teachers is central to working effectively as a facilitator of PL. It was challenging to be reflexive and not allow personal beliefs and values to affect my attitude and engagement with the participants. There was a fine line between balancing personal perspectives with the need to establish and maintain positive relationships, a personal attribute that needs to be developed by the facilitator.

In this study, I experienced difficulty on some occasions during the programme, in being reflexive and not allowing my personal beliefs and values around PE to affect my attitude towards the participants. An example was provided by Tara (Beach School), who in our initial meeting told me “I hate teaching PE”, then she arrived at the first lesson in a skirt, high heels and a handbag over her shoulder, which stayed there for the duration of the lesson (Field Notes-22<sup>nd</sup> February 2011). To maintain the relationship, I had begun to develop with Tara the previous year, reflexivity was required. One of my personal values when teaching PE is that you should be appropriately dressed. As the teacher, if you expect the students to be dressed appropriately, then you should lead by example in the lesson. It would have been very easy for me to insist she changed how she dressed in the PE lessons, but, this could have jeopardised the relationship and the effectiveness of the PL for the rest of the year.

On reflection that evening I concluded that Tara’s idea of PE and what she had been used to delivering could be described as recreation. Her previous involvement in the lesson consisted of providing the students with equipment, presenting a few rules and then allowing the students to entertain themselves until it was time to return to the classroom. Therefore, due to the limited involvement and the majority of the day spent inside the classroom Tara did not see the need to consider what she

was wearing when the students were 'just playing'. After a few lessons and her becoming more involved in the lessons, she changed the way she was dressed on PE days, and her handbag stayed in the classroom. She commented, "I now know why you wear PE gear; it is a lot easier to move around the students, be involved with them and demonstrate skills when you are not tottering around in high heels" (Field Notes-29<sup>th</sup> March 2011). The example has illustrated the need for the facilitator to be reflexive while maintaining the relationship with the participant, a vital attribute found from this study for a facilitator of PL.

In addition to not making judgements, several attributes, both professional and personal were identified in the interviews as prerequisites by the participants of this study as reported in the previous chapter. The teachers indicated that facilitators who demonstrated these attributes provided enhanced PL. The purpose of a PL facilitator is to challenge thinking, change beliefs and attitudes and improve knowledge concerning the curriculum, which, in turn, will contribute to a change of practice within their lessons. Therefore, if the facilitator does not display these attributes when delivering the content, how can we expect the teachers to commit to the new knowledge or practice, in their already hectic days?

Lindsey, a member of the SLT at Ocean School, spoke in her interview about the passion I showed towards the PL programme. She expressed how she did not always see passion and enthusiasm from external providers. Reflection on this comment caused me concern. I did not expect a member of the SLT to inform me that some external providers who had delivered PL in Ocean School did not display a passion for the content they were providing (Field Notes-22<sup>nd</sup> March 2014). Richards and Horder (1999) in their work refer to the 'local champion' who shows charisma, enthusiasm and commitment to the project. I would argue that I was the local champion, but while the positive effect of this can be recognised, being passionate alone is not sufficient to ensure that a PE-PL programme is successful. The passion must be incorporated with the additional professional and personal attributes as detailed in the Findings Chapter.

There appears to be a lack of research concerning attributes required to be an effective PL facilitator. This claim is supported by the BES (Timperley et al., 2007)

which consolidated research surrounding teacher PL and development from around the world, including Aotearoa New Zealand, found very little evidence regarding the qualities needed by a successful facilitator. The research regarding PL concentrated on the characteristics of effective PL programmes and not about personal or professional attributes of the providers. This study has highlighted the importance of building relationships between the provider and the participants of the PL. If the relationships are to be positive, facilitators need to possess these key attributes identified and valued by the participants. It is with this knowledge that I recommend that more research is carried out concerning the desired personal and professional attributes of facilitators and providers. Millions of dollars are spent each year developing PL programmes and then implementing them within schools, both in Aotearoa New Zealand and around the world, as PL for teachers is known to support the improvement of educational outcomes for students. However, if the facilitator does not possess the desired attributes and characteristics to deliver effective PL, the teachers may not be gaining the maximum benefit from the PL provided.

### **Chapter summary**

This chapter has considered the findings generated from the three-year *PE Partnership Programme* provided from 18 teachers in the two case study schools. The first section of the discussion highlighted how the confidence of the primary school teachers increased through the use of the resources, observing the modelled lessons and co-teaching with the facilitator. However, despite the teachers' confidence increasing there were issues with teachers being too reliant on the resources and merely replicating the activities and not adapting them to suit their students from year to year. The use of the TGfU model provided the teachers with an organisational/management strategy to use in the outdoor environment which also assisted in developing confidence, although this was not the primary intention. In addition, it was found that TGfU allowed teachers to ensure all the students were actively involved, with the opportunity to stop the activities when necessary to question or provide feedback/feed-forward to the students. Nevertheless it was clear from the evidence that the quality of the questioning and feedback/feed-forward was not adequate to allow for appropriate student learning due to the lack of specific content knowledge possessed by the teachers.

The second section of this chapter emphasised the importance of the 'knowledgeable expert' building relationships and trust with the participants. Here the need for the facilitator to be able to 'walk the walk' and 'talk the talk' was found to be imperative to the participants. To be able to achieve positive relationships a considerable amount of time was required to be spent within the school communities. Consequently, it has been evidenced that a major component of building these positive relationships between the facilitator and the participants is the acknowledging and respecting of each other's knowledge. Each teacher is a knowledgeable expert with differing areas of strengths and weaknesses and should be treated in this manner. Due to this PL programme occurring over a sustained period the evidence has indicated that relationships develop over the time and in some cases change from purely professional relationships to relationships that could be described as friendships. This situation needs to be recognised, along with the difficulties that arise, as detailed previously.

The final section discussed the responsibilities and attributes identified from the data as significant for the PL facilitator. The evidence has presented specific requirements needed to ensure the PL is successful and appropriate for the teachers. These responsibilities could form the basis of a checklist for secondary PE specialists embarking on the journey to becoming a facilitator of PL. These essential responsibilities include the necessity to fully understand the context which the PL is being delivered, both in the broad educational terms and the specific individual schools. When designing the PL, the facilitator should make sure there is sufficient time built into the programme to allow for opportunities to provide feedback and feed-forward to the teachers as it has been shown that this was a limitation of this study. Also, it is the facilitator's responsibility to ensure as far as possible the programme is sustainable once they have left the school, for the teachers to continue to implement the knowledge gained through the PL programme. The participants identified specific personal and professional attributes as crucial for an effective PL facilitator. In addition to the 17 listed attributes, the data and my personal experience have identified the importance of the requirement to be reflexive and the need to resist making judgements based on your beliefs and values concerning the programme is essential.

This study has demonstrated that providing PL to generalist primary teachers in a learning area that the majority consider to be an area of weakness is a complex issue. Many features and aspects intertwine and impact on each other. In the closing chapter of this thesis, some concluding remarks will be provided about the limitations, concerns and implications that have been raised throughout the Discussion Chapter. Aspects of these will be addressed, in addition to the recommendations resulting from this study that have been presented.

## **Chapter Six: Conclusion**

### **Can a specialist secondary PE teacher support teachers in primary schools to enhance the quality of teaching and learning in PE in Aotearoa New Zealand?**

In short, my answer is yes. However, as will be highlighted in this final chapter, there are some provisos that accompany that answer. The findings from this research and the subsequent discussion would indicate that a specialist secondary Physical Education (PE) teacher can support primary teachers to enhance the quality of the PE lessons they are delivering in their schools. As reported in Chapter Two, many generalist primary school teachers have low levels of confidence when teaching PE (Dyson et al., 2016; Jess et al., 2014; Petrie, 2010a). The data from this research project has demonstrated that the levels of confidence can be increased through a sustained and consistent approach to professional learning (PL) delivered by a secondary PE specialist.

Despite Flintoff (2003) claiming secondary PE teachers are not best positioned to provide PL in primary schools, I support the use of specialist secondary PE teachers as PE professional learning (PE-PL) facilitators. However, it has been highlighted in this research that certain conditions are required to be established to enhance the success of the PL. These conditions will be summarised in this final chapter, alongside a proposal outlining what future PL should include.

#### **Brief overview of the study**

##### PE Partnership Programme - Rationale

As a specialist secondary PE teacher, I suspected that PE in primary schools in many cases was inadequately taught. I had witnessed year 9 students entering my college with minimal experience of PE. Equally, it was evident that they could 'play' sports, such as basketball, softball, volleyball and touch with varying degrees of competency. Yet, the ability to play sport is only a small part of strand B<sup>22</sup> of the

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<sup>22</sup> The NZC (Ministry of Education, 2007) identifies four strands; Strand A-Personal Health and Physical Development, Strand B-Movement Concepts and Motor Skills, Strand C-Relationships with Other People and Strand D-Healthy Communities and Environments.

*New Zealand Curriculum* (NZC) (Ministry of Education, 2007a). The majority of the students exhibit limited ability to demonstrate components of strands A, C and D. As a result, staff in my department and I spent a considerable amount of time teaching the year 9 and 10 students curriculum content from Level 3 and 4, instead of concentrating on Level 5 and 6, the expected level for students in these year groups. This situation was considerably frustrating as in my opinion it hindered the students' progress and subsequently their achievement in *National Certificate of Educational Achievement* (NCEA) at Level 1, 2 and 3.

While at a *KiwiSport* information meeting in 2009 I spoke with several primary teachers about PE in their schools. As a consequence of the conversation, and my previous experience in England with the *School Sport Partnership Programme* (SSP) I applied for *KiwiSport* funding to deliver a PL programme. The successful application provided me with the opportunity to deliver my version of the English SSP in two of my college's contributing primary schools. The Aotearoa New Zealand adaptation, called the *PE Partnership Programme* was an attempt to enhance the teaching and learning of PE in these two schools. It is important to acknowledge that I was the applicant for the funding, the programme designer and the facilitator of the *PE Partnership Programme*.

### The programme in practice

The programme spanned three years, and during each year I worked with a different syndicate. Over the three years all the teachers in both schools participated in the programme. The table below provides more detail.

*Table 11: Participants in each year of the programme*

	Beach School	Ocean School
Year 1	Mix of teachers	Year 3 & 4 Syndicate
Year 2	Year 3 & 4 Syndicate	Year 5 & 6 Syndicate
Year 3	Year 5 & 6 Syndicate	Year 7 & 8 Syndicate

As the facilitator, I worked alongside the teachers for one lesson a week for most of the school year. Each term two or three lessons were modelled, followed by two or three that were co-taught, and then three or four where the teacher took control,

and I supported where necessary. As the year progressed and the confidence of the teachers grew, the ratio was amended to meet their needs.

### Research paradigm and design

An interpretative and constructivist paradigm was adopted for this research, with the social constructivist learning theories of situated learning, communities of practice (CoP), scaffolding and feedback utilised in the delivery of the PL programme. The methodology was qualitative and included the data collection methods of field notes, lesson observations and semi-structured individual and group interviews. The participants were 18 generalist teachers from the two South Auckland primary schools. All the teachers involved in the research had participated in the *PE Partnership Programme* for an extended period (see Appendix J for the breakdown of their involvement).

### Summary of findings

The *PE Partnership Programme* intended to enhance the quality of PE teaching and learning provided by primary teachers. The findings generated from this research have provided specific data which aligns with the work of other researchers. The marginalisation of PE in primary schools continues to transpire by being undermined by factors such as inadequate initial teacher education (ITE), inadequate PL and literacy and numeracy regarded as high priority learning areas. The majority of the participants when questioned spoke about their lack of confidence towards teaching PE (Jess et al., 2014; Petrie, 2010a; Sloan, 2010) due to the very little pre-service training they had received in their ITE (Morgan & Bourke, 2005; Pickup et al., 2007) and the limited availability for in-service training once they had joined the profession. For some participating in this programme it was the first in-service PL in PE they had received, even though some of these teachers were experienced.

Three key learnings emerged from the research that contributes to the existing knowledge base, (i) the importance of situated learning over a sustained period (ii) the importance of relationships, and (iii) the importance of facilitators understanding the context in which they are delivering PL.

All the teachers who participated in the *PE Partnership Programme* spoke of the benefits of participating in the PL. The participants appreciated the fact that the PL was situated in their schools, with their students and using their equipment. The teachers also expressed the value of being involved in a PL programme over a sustained period, as this provided the time to develop the positive, trusting relationships they needed with the facilitator to build their confidence. This outcome is consistent with the work of Patton et al. (2013) and, Pellett and Pellett (2009). Also, they valued the content delivery process of lessons being modelled and the opportunity to co-teach with the facilitator; this affirmed to the teachers that the facilitator understood the context in which they were delivering. Valuing these processes is in accordance with the studies undertaken by Darling-Hammond and McLaughlin (1995) and, Rytivaara and Kershner (2012).

In addition to the positive outcomes of the *PE Partnership Programme*, three issues became apparent from the implementation of the PL programme. Firstly, the data highlighted concerns surrounding the teachers' use of *Teaching Games for Understanding* (TGfU) primarily as an organisational strategy. Teachers also had difficulty using the pedagogical model in the way intended, due to their lack of Physical Education content knowledge (PE-CK). Secondly, the generalist teachers were found to be simply copying the resources (Petrie, 2012; Sallis et al., 1997), one or even two years after they had participated in the PL programme which was not the intention. The aim was that once the teachers had experienced using the resources, they would then adapt the programme of study and the resources to meet the needs of their students. The final concern was the lack of sustainability of the PL programme once the facilitator left, as an exit strategy was not formulated before leaving the schools.

It is from these findings that the recommendations are formulated. The recommendations form the basis of my proposal as to how PL could be implemented with more consideration in the future if it is to be successful in supporting generalist teachers deliver quality teaching and learning in PE.

### **Limitations of the study**

I acknowledge that due to being both the facilitator and the researcher, I was neither unbiased nor removed from the research. It was apparent that I had an interest in this topic as I had initiated the *PE Partnership Programme* before it became the focus of this thesis. Throughout the data collection and the subsequent analysis, I endeavoured to be unbiased in my scrutiny of the data. In an attempt to reduce the impact, I ensured a number of actions were taken; these included reviewing the data consistently and, on many occasions, participating in regular conversations with my supervisors and other colleagues who were undertaking the same doctoral journey. Being a teacher and starting the PL programme and research with some pre-conceived ideas is both a strength and a weakness of this study.

The evidence from this study has confirmed that the support of a secondary PE teacher can improve the quality of teaching and learning in PE lessons delivered in primary schools. However, the research was undertaken in two decile 1 schools, of predominantly Māori and Pasifika students; this can be seen as a limitation to the study. In both schools, the importance of PE was significantly overshadowed by the importance of literacy and numeracy, which severely impacted on the time available to PE-PL. Reports by the Education Review Office (2005) and Education Counts (2016) claimed that Māori and Pacific Island students in decile 1 schools underachieve in literacy and numeracy compared to European/Pākehā students in high decile schools. Consequently, there is a need for future studies to extend the PL programme to generalist teachers in higher decile schools consisting of students from different ethnic groups. Understanding is required to determine if this situation of literacy and numeracy dominating the curriculum is unique to lower decile schools or prevalent across the range of schools. The question then asked is, if there is more time available for PL in learning areas that are not subjected to *National Standards* how does this impact on teacher learning through the PE-PL.

The concept of sustainability can be seen as a limitation for the research due a process not being undertaken when I left the two schools at the end of the programme. Understanding the importance of having procedures in place to ensure the programme is sustainable is something that must occur from the outset. Evidence provided by the work of McKenzie et al. (1997) from the SPARK-PE

research found that if Principals were involved the programme was likely to more sustainable. Thought is essential regarding how the involvement of the Principal can be achieved. Possible proposals could include arranging regular update meetings to inform the Principal of the progress that is being made by the teachers and invitations to observe what is occurring in the lessons. An additional measure to ensure sustainability is to develop a 'champion' teacher who can advocate for the programme with the Principal and other teachers. If money is available, this could be a funded position.

### **A possible future for professional learning**

The time I spent in the two schools was a luxury and more than anyone else has had the opportunity to do. With PL funding now being allocated through the Kāhui Ako strategy, it is unlikely that funding will be sanctioned and dedicated to a programme such as this to support teacher learning and development when PE is not seen to be a priority subject within primary schools. Despite the findings noting significant benefits to the teachers the *PE Partnership Programme* method of delivery is likely to be viewed as being too expensive given the financial cost of a facilitator working one-on-one with teachers as part of a highly intensive programme of PL. As previously stated, the alternative traditional one-off, one-day, off-site courses, are criticised by researchers such as Duncombe and Armour (2004), Hill et al. (2001) and Parker, Patton, and Tannehill (2012), but they acknowledge these are cost-effective as one facilitator can 'train' many teachers. It is, therefore, important that any future PL provides value for money but, is also effective and allows for teacher change to occur. Providing effective PL for primary teachers in PE is not going to happen in the present context. It is essential that the delivery of PL be reconsidered, and a more appropriate method is devised.

Many researchers (for example, for example, Armour & Yelling, 2007; Guskey, 1991; Timperley et al., 2007) have stated what characteristics or factors contribute to effective PL. The findings from this research study have identified three aspects that should be prerequisites to any future PL. These aspects are (i) that context matters, (ii) that time matters, and (iii) factors for sustainable teacher change.

## Context matters

Context certainly matters, facilitators and providers of future PL must have the knowledge and understanding of what is happening in our primary schools and how this impacts on the teachers. The findings from this study have identified the importance of the facilitator having an appreciation of context. The educational context of Aotearoa New Zealand has changed dramatically over the past ten years, and for PE-PL it is a contextual minefield. Furthermore, since undertaking this research, the context within our primary schools has changed again. Most notably are, the change in policy that has resulted in the withdrawal of *National Standards* in literacy and numeracy as a measure of student achievement (Hipkins, 2017) and the change to the structure of the PL model (Ministry of Education, 2017a).

The announcement that *National Standards* were no longer statutory from the beginning of 2018 would imply, that the emphasis on literacy and numeracy might not be as significant, and therefore, schools would, arguably, be ‘freed up’ to spend more time on the learning areas that had previously been marginalised such as PE. However, this appears not to be the case, in my current role as a Play.sport<sup>23</sup> mentor I have seen schools placing the same amount of emphasis on these two subjects and in some cases more. The consequence of performativity, reinforced during the *National Standards* era, continues to be very dominant within the mindset of teachers and Principals. It has an enormous legacy effect where school practices are maintained, despite the capacity for things to be altered. Acknowledgement of this situation is required by future PE-PL facilitators as the task of being able to provide PL in PE is extremely difficult because it is still seen as a low priority learning area.

The structure of providing funding to schools was altered in 2016 by the MoE, so consequently the PL model changed from individual schools having the ability to decide what their allocated PL funding was spent on, to a model of communities of learning (CoL) or Kahui Ako. The new model encourages schools to form CoL’s with other local schools with a CoL consisting of a combination of around 10 primary and secondary schools. The schools then decide on the priorities through

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<sup>23</sup> Play.sport - is a collaborative intervention led by Sport NZ to improve the quality of physical education (PE), sport, physical activity and play experiences in schools, and the connection between schools and their communities, including sports clubs and the home. The project is being piloted in 45 schools in Waitakere and Upper Hutt.

the evidence collected from an inquiry. Central funding is then applied for from the MoE to deliver the PL based on the achievement challenges that have been submitted. The concept of the CoL appears to be positive as it meets many of the effective PL criteria evidenced in the literature such as student focussed, situated in schools, collaborative, sustained periods of time and working towards a common objective.

It has become evident that the process of applying for funding is very time consuming and numerous personnel are required to be employed to form the CoL. Leaders of learning are employed from the schools to contribute to the delivery of the PL. However, it appears that the leaders of learning (often secondary teachers) receive very little mentoring for their role in delivering PL and supporting other teachers. Considering the evidence from this research, I would judge this to be a significant flaw in this model. In addition to the leaders of learning, accredited facilitators are also utilised. An accredited facilitator is someone, often from PL providers who have completed the extensive accreditation process. Initially, there was only one accredited facilitator for PE in the entire country; this has since increased to five compared to over 300 for literacy and numeracy. I deem this is reinforcing the messages regarding what is important within the NZC and what learning areas are still being marginalised.

A further concern is that the majority of the established CoL's around the country have achievement challenges concerning the improvement of literacy and numeracy across the schools. Although literacy and numeracy *National Standards* are no longer mandatory, these two subjects are still regarded as high priority subjects along with science and digital fluency. On scrutiny of this new model for PL, it would appear that learning areas that are not viewed as high priority are still going to miss out on PL funding unless they can be woven into the achievement challenges in a creative manner.

An added detrimental consequence of the high priority placed on literacy and numeracy and the lack of PE advisors has been the overwhelming increase in the number of external providers offering their service to schools, to provide PE and sports opportunities to students in both the curricular and co-curricular space

(Dyson et al., 2016; Penney et al., 2013; Petrie, Penney, et al., 2014; Powell, 2015). The majority of external providers are sports orientated organisations with facilitators who, as previously discussed, are coaches rather than teachers and possess entry-level coaching qualifications. As Petrie, Penney, et al. (2014) declared, few external providers of HPE in the Aotearoa New Zealand context ‘appear to have knowledge of learners or learning, education settings, curriculum or pedagogy’ (p. 31). If the external providers exhibited this knowledge, understanding and qualifications for working within the school setting, more acceptance would be directed towards these providers. A possible outcome could be that external providers being able to provide more options for primary schools and the assurance that PE was being taught in accordance with the NZC.

The two schools in this research did not use the services of external providers while the *PE Partnership Programme* was being delivered, although they had in the past. Due to the improved knowledge gained through the PL, members of the senior leadership teams (SLT) and the teachers of both schools referred to taking more time to consider the offerings of external providers in the future to decide whether there are benefits to be gained by the students before agreeing to such programmes.

These contextual features are affecting schools nationally, but in addition, there are local features. Every school is different in Aotearoa New Zealand; they may be grouped using labels such as high or low decile, single-sex or coeducational, urban or rural, full primary, contributing primary, intermediate, high school or college. However, even two schools that are ‘labelled’ the same have completely different local contexts within the walls of the schools. In the past, many PL providers in Aotearoa New Zealand have been guilty of using a strategy whereby one programme is used across all the schools they operate; this is commonly termed a one-size fits all approach (Petrie & McGee, 2012). The evidence gained from this study confirms this type of approach is not appropriate. Programmes can be similar but not identical due to the unique context of each school. As the context changes between the schools, it is essential for facilitators to comprehend this before commencing a PL programme in a school.

Teachers and PL providers have to work amidst and negotiate the contextual factors described above. It is often a minefield with pressures being placed on teachers from many different directions and attempting to provide the best for the students in their care. If primary teachers are to provide appropriate PE experiences for their students, it is essential that the facilitators of future PL must understand and have a knowledge of the context in which teachers are working. In addition, any secondary specialist PE teachers who are involved in delivering PL through the CoL networks or cluster groups need to have this understanding as the primary and secondary school contexts are very different. It is evident from the findings that facilitators have a duty to gain an understanding of these contextual factors before embarking on the delivery of any PL.

Gaining the necessary understanding of the local factors can only be achieved by spending time in the school, talking to teachers, the senior leadership teams (SLT) and observing the interactions between the students and teachers in lessons and at interval time. Under the current conditions and contextual influences of *National Standards* and centrally funded PL through Kāhui Ako which satisfies the priority learning area policy, this is not possible. It is essential that PL is thought about differently, to take into consideration the effects the national and local context has on schools and teachers.

#### Time matters

Time is crucial and is extremely significant to create effective PL (McKenzie et al., 1997; Penney et al., 2013; Petrie et al., 2013; Petrie et al., 2007). As the concept of time has been found to be significant from the findings, four different categories have been identified. To create sustainable teacher change, these conditions concerning time must be observed:

1. Time is essential – for the facilitator to;
  - a. Understand the contextual features of education and the school
  - b. Build relationships with the participants
  - c. Allow for collaborative planning of the PL
  - d. Provide modelling and co-teaching in lessons
  - e. Deliver feedback and feed-forward to the participants after lessons

- f. Build the knowledge of the participants
- 2. Time out of school is essential – for the participants
  - a. Time to think away from the hustle and bustle of school
  - b. Time to spend learning and developing curriculum programmes etc.
- 3. Time in school is essential with the facilitator
  - a. To observe modelled lessons
  - b. To participate in co-teaching with the facilitator
  - c. To participate in feedback and feed-forward debriefing sessions
- 4. Time is continued
  - a. Sustained time in the partnership
  - b. Is regular and consistent with each participant

For change in teaching practice to happen, positive and trusting relationships need to be established between the participants and the facilitator. Positive relationships can only be fostered through the facilitator spending adequate time with the participants. Once the teachers have ascertained the facilitator can ‘talk the talk’ and ‘walk the walk’, they are more likely to commit to building a relationship with the facilitator.

The evidence from this study shows that the teachers valued the time spent nurturing the relationships as the co-teaching required teachers to place themselves in a vulnerable position. The teachers expressed they would not be willing to participate in this type of PL if they did not feel confident and secure with the facilitator. The findings illustrate that for teachers to acquire this level of trust takes between 10 and 20 sessions on a weekly basis, a substantial amount of time.

It is essential that providers of any future PL acknowledge that sufficient time is required but then also how the time is utilised effectively. Collaborative planning is a prerequisite to ensure the context of the school is taken into consideration and to establish the needs of the teachers. The *PE Partnership Programme* was planned entirely by myself after an initial discussion with the teacher in charge of sport at each of the schools and being viewed as the ‘knowledgeable expert’. If collaboration occurs between the facilitator and the participants, assumptions,

beliefs about practice and context can be exposed (Orland-Barak & Tillema, 2006) to enhance the learning of both the facilitator and the participants.

Time is also required to provide the teachers with feedback and feed-forward that is needed for their learning. Due to the structure of *PE Partnership Programme*, there was insufficient time available to allow for debriefing with the teachers after they had either co-taught or taught the lesson. On completion of the lesson, teachers had to take their class back to the classroom and continue with their daily programme. Possible solutions are detailed in Chapter Five, but both have implications on the staffing at the schools. As teachers, we ensure we provide feedback and feed-forward for students, so this should be the same for the participating teachers as they are learners in this situation.

The further factor identified was the availability of time to allow for PE-CK, PCK and curriculum knowledge to be developed further. The teachers developed and increased their PE-CK, and PCK compared to before the PL programme. However, as discussed in the previous chapter, the lack of PE-CK and PCK affected their ability to provide feedback and feed-forward to the students and hindered their capability to alter activities when they were not successful. Additionally, the development of PE-CK would support and encourage the adaptation of resources, so teachers were not simply replicating as was evident in the data. Although data concerning the development of curriculum knowledge was not explicitly collected in this study, it is apparent that time needs to be provided within the PL to allow teachers to engage in the process to increase curriculum knowledge. Gaining a greater understanding of the NZC will assist teachers to comprehend the rationales for the choice of activities and learning opportunities undertaken in the PL programme.

A programme that continues over a prolonged period allows for the facilitator to model lessons and then co-teach with the participants. Both the modelling of lessons and co-teaching was regarded by the participants as an extremely valuable part of the PL programme. The findings further corroborate the work of Darling-Hammond and McLaughlin (1995) whose guidelines for policy-makers included the use of modelling and coaching over a sustained period. Also, the inquiry into the SPARK-

PE approach by (McKenzie et al., 1997) showed the importance of extended time for the PL.

### Creating sustainable teacher change

PL programmes are designed to bring about change in teachers' classroom practices, a change in the student learning outcomes and consequently a change in teachers attitudes and beliefs (Guskey, 1986). Creating change requires time as the teachers need to be able to see that transformation of their practice affects the students' learning. The *PE Partnership Programme* created change in the generalist teachers' attitudes and beliefs towards PE, through a change in their practice that was introduced through the PL and this is evidenced in the findings. However, through the discussion of the data, concern has been drawn to the lack of sustainability of the programme. It is therefore essential, that any future PL create a process where sustainable change is guaranteed as far as possible.

The *PE Partnership Programme* did not address the situation of there being a teacher in charge to ensure sustainability. It is recommended that at least one of the participants of the PL needs to be in a position in their school where they have the capability to propose and make changes to policy, processes and learning programmes within the school. The suggested person for this role is an empowered teacher who has a commitment to developing PE within their school. In many primary schools, there are teachers who are in charge of Sport, but this teacher may not be the most appropriate as their attention is on sport and not PE. It would be advisable that schools have two separate roles, a teacher in charge of PE and a teacher in charge of Sport. The distinct roles would ensure the focus is applied to PE and the development of this learning area and not be overtaken by the demands of sport and team organisation for tournaments which is extremely time consuming. The PL participant should be encouraged to work with other teachers in their school to provide support, either in one syndicate or simply with interested teachers. The facilitator can also support the participant in a manner that best suits the needs of the school. Creating sustainable change will appear differently in each school as it will be individualised depending on the context and the teachers' needs.

It is also, recommended that future PL be in the format of groups of schools in clusters or officially recognised CoL. The use of clusters and CoL is advocated for by the School Sport Futures Project (Sport New Zealand, 2015), Kāhui Ako (Ministry of Education, 2017a), the Scottish Developmental Physical Education Group (DPEG) (Jess & McEvelly, 2015) and by the PE and Sport in Primary Schools Report (Penney et al., 2013). Flexibility however, is required within the structure to take into consideration the different contexts in which each of the participants teaches. It is suggested that at times the facilitator would operate with the cluster/CoL as a whole, but at times may work with individuals or pairs of participants. The use of clusters and CoL allows the PL to be located on-site, that is within the schools the teachers are employed, again found to be significant by the work of McKenzie et al. (1997), Penney et al. (2013) and Sport New Zealand (2015).

The third recommendation concerns changing the priority given to literacy and numeracy within the school. Change is ideal but possibly unrealistic in the current context. Therefore, if change is not obtainable, then the people responsible for the learning area of PE need to become more creative in raising its profile. At this time PE is not seen to be a priority by the MoE and, therefore, PE-PL programmes are not likely to be funded through the revised Professional Learning and Development (PLD) (Kāhui Ako) programme. However, the Ministry has stated that “centrally funded professional learning and development will offer leaders and teachers the opportunity to analyse the results they are seeing, define the issues, and work on changes and improvements that will lift outcomes in these focus areas” (Ministry of Education, 2017b). Facilitators will be required to be creative to meet the requirements set out by the MoE. Stothart (2000) described PE and sport as uncomfortable bedfellows, and maybe PE and literacy/numeracy can be described in the same terms. To gain more recognition maybe PE needs to become a bedfellow of literacy and numeracy through incorporating elements of these subjects explicitly into PE and developing a thematic approach. This could be an area where the facilitator assists the teachers to develop an more integrated approach to the learning areas instead of the traditional siloed method of teaching or supports the development of a unit of work, for example around a forthcoming significant school

sporting event or one that utilises data generated from the students' activity within PE lessons.

The recommendations described above for future PL are not specific to PE; this model could be applied to all the current low-priority learning areas. Change is needed to the methods of delivery and organisation of PL. Examples are provided of how this could be achieved taking into consideration the findings from this research project. Required now is for the MoE, Sport New Zealand and other organisations/subject associations relating to the arts, music, and technology to examine their funding models and consider these recommendations. The consequences of not making changes need to be recognised to ensure that as educationalists we provide our children with the best education system possible and that this is achieved through providing our teachers with the best possible PL.

### **Final thoughts**

Throughout the research, *National Standards* have been shown to have had an impact on generalist teachers' priorities, the time available for other learning areas and the PL opportunities offered to them. The findings highlight that although the NZC provides a "clear statement of what we deem important in education" (Sewell, 2007, p. 4), what has become important has more closely reflected a narrowing curriculum focused on literacy and numeracy as schools respond to the demands of *National Standards* (Thrupp & White, 2013).

Despite *National Standards* no longer being mandatory as of January 2018. The legacy effect is still very much apparent in schools several months on from the ending. Performativity and accountability continue to play a significant part in the teachers' day to day working life. What effect the change to policy will have on primary teachers and the marginalised learning areas only time will tell. The ending of the *National Standards* could provide an opportunity to remove many of the contextual barriers not just for PE but the other learning areas at present being marginalised. If schools do address the imbalance between learning areas, PL will be vital to increase the generalist teachers' confidence and ability to deliver PE in the near future due to the neglect over recent years. I believe the provision, organisation and delivery of PL has to be subjected to radical alteration in order to

achieve a PL system that ensures sustainable change through the teachers being the change agents. If Aotearoa New Zealand is to provide our students with a broad and balanced curriculum as the NZC advocates, teachers need to be confident and equipped to deliver quality lessons not just in PE, but also in the other marginalised subjects.

Finally, the findings from this research have illustrated the importance and value of PL in PE for generalist primary school teachers. If students are to experience PE positively, through the best opportunities available, then teachers need to be provided with PL that allows this to occur. It is anticipated that these insights will stimulate the MoE and Sport New Zealand to rethink their approach to PE-PL for the generalist teachers in the primary schools of Aotearoa New Zealand.

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## Appendices

### Appendix A: Example of a Resource Card



#### PURPOSE OF GAME

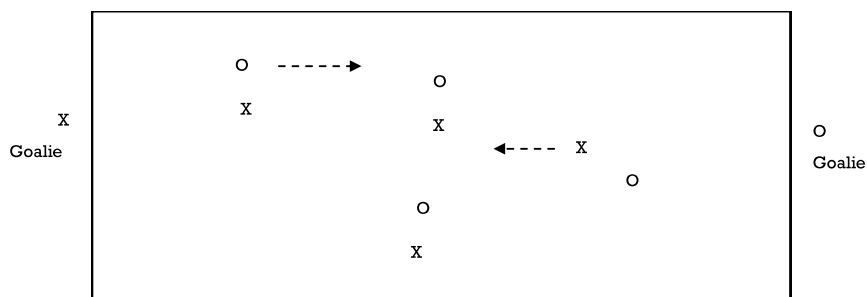
- To explore passing options that will move the ball down the court to set up scoring opportunities.
- To determine what options are available to make passing, receiving and scoring difficult for an opponent.

#### EQUIPMENT: per group

Rectangular playing area (size of a third of a netball court)

Coloured bands for each team

Netball



#### HOW TO PLAY

- Two even teams of 4 v 4 (no more than 5 v 5), 1 player should be the goalie.
- The game starts with 1 team in the middle of court with the ball.
- The ball is passed amongst the team till it can be passed to the goalie.
- If the goalie catches the ball 1 point is scored and the game is restarted in the middle by the opposite team.
- The players cannot run with the ball, all players must stay inside of the court except the goalie who is not allowed onto the court.
- No contact between the players is allowed.
- Defenders must be 1 metre away from the player with the ball.
- Defenders may intercept the ball.

**FOCUS QUESTIONS****Attackers**

- When should you pass to a team mate on court or the goalie?
- How can you work with your team mates to assist the person with the ball?
- What can you do if you move into a new space before your team mate is ready to pass?

**Defenders**

- How can you stop your opponent from receiving the ball?
- What can be done to make the pass to the goalie difficult?

**VARIATIONS**

1. Restrict the time in possession (eg 3 seconds)

*Focus Question*

- How can you increase pressure to make passing difficult within time limit?

2. Restrict the areas players are allowed in (eg attacking and defending roles within team, only allowed in half the court)

*Focus Question*

- Have you changed your play to suit the new rules?

3. Change the target (eg netball hoop, hoop on the ground, have 2 targets)

*Focus Question*

- How do the different targets change how you try to score points?



Adapted from Games Sense Cards - Active Australia

## **Appendix B: Pools iN SchoolZ**

In late 2009, Dr Ian Calhaem conceived the idea of taking portable swimming pools to primary schools, as part of the answer to the growing problem that many schools are prevented from teaching water safety and swimming skills because of the lack of access to swimming pools. Teaching water safety to children at an early age is essential as drownings, and other water-related accidents are a serious problem in Aotearoa New Zealand. Many Aotearoa New Zealand primary schools were built with outdoor swimming pools but the cost of maintaining and upkeep to be used for just one term a year has become unmanageable to many schools. As a result, many have been closed and some bulldozed to make room for other buildings. The cost of transporting students to a pool has also become too expensive and not cost-effective for schools.

Dr Calhaem designed, funded and built a pilot pool that was successfully trialled by WaterSafe Auckland, proving that portable pools are practical and cost effective. Pools iN SchoolZ was established as a charitable trust in March 2011, and the first six pools were taken to schools in April 2011. There are now 15 pools in operation around Auckland and 44 schools involved in the project. However, it is estimated that at least 100 pools are needed to make a significant difference. The Pools iN SchoolZ project is now an initiative of the Adam Brown Water Safety Trust.

This initiative provides the pools to schools throughout the year on a termly rotation system. It allows schools to deliver swimming lessons on site for its pupils, which is more convenient and cost-effective than transporting them to the local swimming pools.





## **Appendix C: Interviews with the Principals and Deputy Principals**

### Protocols for Interviews

The interviews will begin by myself (the interviewer) introducing the context of the interview to the participants. This will include the:

- purpose of the interview, and how the information will be used;
- use of the voice recorder;
- participants having the right to refuse to answer any particular question;
- participants having the right to turn the voice recorder off at any stage during the interview;
- opportunity for participants to ask any questions about the interview/process before the interview begins.

The end of the interview or group interview will include a debriefing which will allow me to recap some of the main points I have learnt from the interview. At this time the participant(s) will be invited to comment or provide any feedback. I will then invite the participant(s) to bring up any questions, concerns or thoughts that they may have. This will give the participant(s) an opportunity to raise or deal with any issues that have arisen through the interview. After I have addressed any concerns or thoughts I will then be able to conclude the interview by thanking them for their participation.

### Semi-structured Interviews with the Principals and Deputy Principals

The two Principals and two Deputy Principals from both schools will be invited to take part in these interviews. Questions will include:

- How are decisions made regarding what are the priorities for PD / PL within the school?  
*(Explore if priorities are always Literacy & numeracy or do they change year by year)*
- Do members of staff have access to PD / PL other than what is collectively arranged for the staff? *(How much, how many days / hours? Does this have to be the same as the school priorities?)*
- Prior to the partnership was PE seen as an important learning area by the school, the staff or the students? *(Explore money committed to PE – KiwiSport money has this taken over the budget? Is PE monitored in the same way as Literacy & Numeracy, is it reported on in reports to parents, would teachers miss PE lessons for bad weather, would they catch them up?)*
- Has this view changed since the programme has been delivered within the school?
- What changes, if any have you seen from the staff as a result of the partnership? *(Explore the impact of specialist support, confidence, planning, knowledge, shift in importance)*
- What would you like to see happen within the school with regards to PE now the partnership has finished?

- If the partnership were to be introduced to other schools what would you develop, change? What advice would you give to their SMT's?
- What impact has the partnership had on the teaching of PE across the school?
- Do you believe this programme is now sustainable within your school? What is the basis of your opinion? (*Explore any need for further PD /PL, training of new staff into the syndicate for continuity*)
- Would you consider the possibility of a teacher in charge of PE rather than Sport in each syndicate? (*Explore yes, no, why*)?

## **Appendix D: Interviews with the individual teachers**

### Protocols for Individual Interviews

All of the interviews will begin by myself (the interviewer) introducing the context of the interview to the participants. This will include the:

- purpose of the interview, and how the information will be used;
- use of the voice recorder;
- participants having the right to refuse to answer any particular question;
- participants having the right to turn the voice recorder off at any stage during the interview;
- opportunity for participants to ask any questions about the interview/process before the interview begins.

The end of the interview will include a debriefing which will allow me to recap some of the main points I have learnt from the interview. At this time the participant will be invited to comment or provide any feedback. I will then invite the participant to bring up any questions, concerns or thoughts that they may have. This will give the participant an opportunity to raise or deal with any issues that have arisen through the interview. After I have addressed any concerns or thoughts I will then be able to conclude the interview by thanking them for their participation.

### Interview Questions for Individual Teachers

Two teachers from each of the syndicates at both schools will be invited to take part in these interviews.

Questions will include:

- Can you give me an overview of your teaching experience? (*Explore no of years' experience, year groups have you previously taught, specialist learning area*)?
- If you look back over your teaching career and the general professional development/learning opportunities you have experienced, what would you suggest are the key features that make professional learning/development effective or successful?
- Prior to the partnership how much PD / PL have you undertaken in PE. Considering both your ITE and teaching career.
- Prior to the partnership what were your feelings / opinions around the learning area of Physical Education? (*Explore importance / value of PE, where did ideas come from*)?
- Thinking about the time you have spent with me throughout the partnership, what are your opinions about the partnership in regards to organisation, delivery and effectiveness? (*Explore length, number of lessons, feedback provided, activities, impact of specialist support*).

- If the partnership were to be introduced to other schools, what would you develop or change?
- What are you going to do now and in the future in regards to your teaching of PE? *(Explore any development or just repeating, has importance / value of PE changed)*
- With regards to your teaching and students' learning of physical education, has this changed as a result of participating in this PL? If so, how and why? *(Explore value of PE, planning, range of activities, confidence in delivery, knowledge)*
- In your opinion what does a high quality PE programme look like to you? *(Explore activities, number of lessons, type of teaching)*

## **Appendix E: Group Interviews with the syndicates**

### Protocols for Interviews

All of the interviews will begin by myself (the interviewer) introducing the context of the interview to the participants. This will include the:

- purpose of the interview, and how the information will be used;
- use of the voice recorder;
- participants having the right to refuse to answer any particular question;
- participants having the right to turn the voice recorder off at any stage during the interview;
- opportunity for participants to ask any questions about the interview/process before the interview begins.

The end of the interview or group interview will include a debriefing which will allow me to recap some of the main points I have learnt from the interview. At this time the participant(s) will be invited to comment or provide any feedback. I will then invite the participant(s) to bring up any questions, concerns or thoughts that they may have. This will give the participant(s) an opportunity to raise or deal with any issues that have arisen through the interview. After I have addressed any concerns or thoughts I will then be able to conclude the interview by thanking them for their participation.

### Group interviews with the syndicates

Group interviews will take place with each of the syndicates at both schools.

Questions will include:

- Thinking about the time I have spent with the syndicate throughout the partnership, what are your opinions about the partnership in regards to organisation, delivery and effectiveness? (Explore impact of programme, specialist support, *length, number of lessons, feedback provided, activities, impact of specialist support*).
- Can you describe what were the most effective and least effective parts of the partnership?
- Do you think the relationship between the specialist PE teacher and the syndicate is important?
- This was intended to be a collaborative partnership. Do you feel there was enough collaboration between the syndicate and myself? Can you give examples that are positive or negative?
- What advice would you give to another syndicate if they were about to embark in a partnership the same as this?
- Do you feel the syndicate and I were a 'community of practice'?

- Have your attitudes / feelings changed towards teaching PE now you have participated in the PD / PL?
- What are you going to do now and in the future in regards to your teaching of PE?
- Can you describe both your positive and negative experiences of taking part in the programme?  
*(Explore why positive, negative, will they take knowledge etc with them if they move to another school and instigate there)?*
- If this programme were to continue what would you like to see happen / develop?
- Do you believe this programme is sustainable within your syndicate? *(Explore planning of future PE programmes, new members to the syndicate)*
- Now in 2014, is the programme being repeated or is it being taken forward, developed?  
*(Explore by whom? how and why?)*

## Appendix F: Observations of Physical Education Lessons

### Protocols for Observations

I will conduct all of the lesson observations, in the normal timetabled lessons for physical education during the week. The lesson observations will span over a period of approximately four weeks (Term 1 - week 9 & 10 and term 2 – week 1 & 2). I will take the role as a participant observer within the lessons as the students are used to me being involved in the lessons. I will not be taking written notes throughout the observation but will be making voice memos which will be written up at a later date.

Beach School	Ocean School
Observation of PE lessons x 5 - year 3 & 4 Syndicate (45min each) x 4 x 5 - year 5 & 6 Syndicate (45min each) x 4	Observation of PE lessons x 5 - year 3 & 4 Syndicate (45min each) x 4 x 5 - year 5 & 6 Syndicate (45min each) x 4 x 5 - year 7 & 8 Syndicate (45min each) x 4

### Lesson Observations

I will observe all teachers of each syndicate teaching four physical education lessons over a four-week period. The observations will be attempting to identify whether quality physical education lessons are being delivered following the professional learning the teachers received. An observation template will be used to record the following information.

#### General information of the lesson

- date, time and length of the lesson
- class, year group and teacher
- gender split of the class
- activity

#### Aspects of what I have modelled / taught

- how to group students effectively
- suitable warm up activities
- small sided games
- questioning for learning and understanding

#### Student Engagement

- responding during questioning by the teacher
- actively participating
- demonstrating key competencies

#### Teacher Involvement

- movement between the groups
- demonstrating skills and activities
- questioning / talking to students whilst taking part in activities
- coaching within the games
- giving praise and correcting when necessary

#### Researcher reflections / comments

- space to write reflections or general comments on the lessons



**Appendix G: Lesson Observation Template**

School -	Teacher -	Date -
Year Group -	Class - M = F =	Time -
Length of Lesson -	Activity -	
Learning Intentions		Met / Not Met?
•		Yes No Partly
•		Yes No Partly
•		Yes No Partly
Warm Up		
Main Activities / Student Engagement		

	<b>Teacher Activity / Involvement</b>	<b>Researcher Reflections / Comments</b>
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## Appendix H: Codes used in Data Analysis

<p><b>Process of PD</b></p> <ul style="list-style-type: none"> <li>• Teacher change</li> <li>• Resources</li> <li>• Modelling</li> <li>• Attitude to PE after</li> <li>• Specialist support</li> <li>• PD effective factors for teachers</li> <li>• Future developments</li> <li>• Positives for the PD</li> <li>• Sustainable</li> <li>• Feedback to teachers</li> </ul>	<p><b>Partnerships</b></p> <ul style="list-style-type: none"> <li>• Modelling</li> <li>• Team teaching</li> <li>• Organisational communication</li> <li>• Pedagogical communication</li> <li>• Sustainable</li> <li>• Feedback to teachers</li> </ul>
<p><b>Pedagogy</b></p> <ul style="list-style-type: none"> <li>• TGfU</li> <li>• Questioning</li> <li>• Inclusion</li> <li>• Equity</li> <li>• Relationships</li> <li>• Inter personal skills</li> <li>• Content knowledge</li> <li>• Safety issues</li> <li>• Progression</li> </ul>	<p><b>Quality PE</b></p> <ul style="list-style-type: none"> <li>• Nature / purpose</li> <li>• Content</li> <li>• Pedagogy</li> <li>• Resources</li> <li>• Key competencies</li> <li>• Evaluation of lesson</li> <li>• Happy, Busy, Good</li> <li>• Teacher interaction (not instructional)</li> <li>• Value of PE</li> <li>• Meaning of PE</li> </ul>
<p><b>Student Outcomes</b></p> <ul style="list-style-type: none"> <li>• Engagement</li> <li>• Enjoyment</li> <li>• Participation</li> <li>• Improvement in performance</li> <li>• Evidence of learning</li> </ul>	<p><b>Background</b></p> <ul style="list-style-type: none"> <li>• Attitude to PE before</li> <li>• Teaching experience</li> <li>• Specialist subject</li> <li>• Barriers to PE</li> <li>• Frustrations</li> <li>• Confidence before</li> <li>• Confidence after</li> <li>• PE PD</li> </ul>

<p><b>PD</b></p> <ul style="list-style-type: none"> <li>• Attitude of teachers before</li> <li>• Attitude of teachers' after</li> <li>• Confidence before</li> <li>• Confidence after</li> <li>• Factors for choosing PD</li> <li>• Value of PE</li> <li>• Specialist support</li> <li>• Effectiveness of programme</li> </ul>	<p><b>Process of PD</b></p> <ul style="list-style-type: none"> <li>• Teacher change</li> <li>• Resources</li> <li>• Modelling</li> <li>• Attitude to PE after</li> <li>• Specialist support</li> <li>• PD effective factors for teachers</li> <li>• Future developments</li> <li>• Positives for the PD</li> <li>• Sustainable</li> <li>• Feedback to teachers</li> </ul>
<p><b>Partnerships</b></p> <ul style="list-style-type: none"> <li>• Modelling</li> <li>• Team teaching</li> <li>• Organisational communication</li> <li>• Pedagogical communication</li> <li>• Sustainable</li> <li>• Feedback to teachers</li> </ul>	<p><b>BES Principles</b></p> <ul style="list-style-type: none"> <li>• Focus on student outcomes</li> <li>• Worthwhile content</li> <li>• Integration of knowledge and skills</li> <li>• Assessment for professional inquiry</li> <li>• Multiple opportunities to learn and apply info</li> <li>• Approaches responsive to learning process</li> <li>• Opportunities to process new learning with others</li> <li>• Knowledge expertise</li> <li>• Active leadership</li> <li>• Maintaining momentum</li> </ul>
<p><b>PE-PCK</b></p> <ul style="list-style-type: none"> <li>• Knowledge of PE as a subject</li> <li>• Knowledge of PE curriculum</li> <li>• Knowledge of teaching methods in PE</li> <li>• Knowledge of students learning of physical activity</li> <li>• Knowledge of PE assessment</li> <li>• Knowledge of instructional environments in PE</li> </ul>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Knowledge – for – practice</li> <li>• Knowledge – in – practice</li> <li>• Knowledge – of - practice</li> </ul>





## Appendix J: Breakdown of lessons each teacher participated

### Beach School

School	Teacher	Year 1	Year 2	Year 3	Total
Beach	Tara	14	26		40
	Linda	4	26		30
	Margaret	3	21		24
	Donna	4	25		29
	Mary	4		28	32
	Joanne			27	27
	Becky	4		27	31
	Millie			27	27
	Sarah	4		27	31

### Ocean School

School	Teacher	Year 1	Year 2	Year 3	Total
Ocean	Rachel	15		8	23
	Rosie			14	14
	Diane		14	10	24
	Skye		28	8	36
	Laura		19	8	27
	Debbie			8	8
	Helen			34	34
	Ashley	14	13	30	57
	Judy			27	27

Table 2 – Overall data from *KiwiSport* Reports

	Year 1	Year 2	Year 3	Total
No of Teachers involved	26	19	21	66
No of Hours Delivered	188	231¼	281½	701¼
No of session (30 – 60mins in length)	204	301	348	853
No of Individual participants	933	853	994	2780